

9 April 2020

ADDENDUM NO. 3 Appoquinimink School District Everett Meredith Middle School Bid Package 'A' Page 1

The bid due date has been extended.

Bids will be received until 2:00 p.m. on Tuesday, 28 April 2020. No questions from bidders will be accepted after, Tuesday, 21 April 2020.

The location for receipt of bids is Room 148 of the Appoquinimink School District, Marion Proffitt

Training Center, 118 South Sixth Street, Odessa, Delaware 19730

In accordance with the active Public Health State of Emergency related to the novel coronavirus ("COVID-19"), and Social Distancing recommendations of the Delaware Department of Health and Social Services, the Approquinimink School District will be proceeding with the following logistics plan for managing bid receipts and the subsequent public bid opening:

- 1) Physical copies of bids will be received at the Appoquinimink School District, Marion Proffitt Training Center, 118 South Sixth Street, Odessa, Delaware 19730. Bids may be hand delivered or mailed/shipped. <u>Electronic bids will not be accepted</u>. Bidder assumes full responsibility for timely delivery at location designated for receipt of bids. Any bids received after the stated time will be returned unopened.
- 2) School district personnel will be available to receive the bids on Tuesday, 28 April 2020, from 8am until 2pm local time. Signs will be posted at the main entrance directing bidders to the appropriate drop off location.
- 3) A public bid opening will be held immediately following the 2pm submission deadline, in the Board Room of the Marion Proffitt Training Center. Although the Appoquinimink School District is not prohibiting public presence at the bid opening, for the safety of the general public the State of Delaware guidelines for social distancing and public gatherings will be enforced. In an effort to reinforce recommended social distancing, the Appoquinimink School District strongly encourages attendees attend the bid opening via YouTube live stream at the following link:
  - a. Full link:

https://www.youtube.com/channel/UC7nnAUtcNQgymmVQCCNiaSg/videos?view\_as=public

b. Abbreviated Link:

bit.ly/appoyoutube

c. Alternative Conference Call Line:

Number: +1 (646) 558 8656 Access Code: 333 990 692

d. A recording of the bid opening will remain available for future access at the link above.

Note: Bid Documents obtained through the State of Delaware Government Support Services

Website (bids.delaware.gov), are not for bidding purposes. Bid Documents may be viewed

and downloaded at EDiS' FTP site. To obtain access to the FTP site, please submit your

request via email to Jackie McKee at jmckee@ediscompany.com.

NOTICE: Attach this addendum to the project manual for this project. It modifies and becomes a part of the contract documents. Work or materials not specifically mentioned herein are to be described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this addendum on the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

Whenever this Addendum modifies a portion of the Project Manual added information is shown as **Bold** and deleted information is shown as **strikethrough**.

The contract documents for the above referenced project, dated February 21, 2020 are amended as follows:

#### **GENERAL CLARIFICATIONS:**

- 1. In Addendum No. 2 the following items in the narrative need to be clarified:
  - a. Under the Modifications to Specifications section, item 4.B.4, the scope item should have been 12.g, not 11.g.
  - b. Under the Modifications to Specifications section, item 4.B.5, the scope item should have been 12.i, not 11.i.

### **QUESTIONS AND ANSWERS:**

1. See attached responses to RFI's – 3, 6, 8, 10, 14, 16, 17, 19, 23, 29 & 30.

### **MODIFICATIONS TO SPECIFICATIONS:**

- 1. SECTION 003132 GEOTECHNICAL DATA
  - a. Page 003132-1, Paragraph 1.B: ADD subparagraph C:

## "C. UTILITY LOCATION DATA

- 1. Underground utility reports and location plans from SoftDig Underground Services, Inc., dated October 29, 2019 through November 4, 2019, are included in the project manual."
- b. INSERT the Underground utility reports and location plans from SoftDig Underground Services, Inc., dated October 29, 2019 through November 4, 2019, after the Geotechnical Report.



- 2. SECTION 011100 SUMMARY OF WORK; make the following pen and ink changes:
  - a. CONTRACT A-01 DEMOLITION
    - 1. ADD the following items to the Equipment List issued with Addendumn No. 2

<b>EQUIPMENT</b>	DISPOSITION	MAKE/MODEL/SERIAL	ADDITIONAL INFO
Stage Curtains	ASD to salvage	N/A	Located in Auditorium
Stage Scrims	ASD to salvage	N/A	Located in Auditorium
A/V Equipment	ASD to salvage	N/A	Located in Auditorium

#### b. CONTRACT A-02 SITEWORK

1. ADD the following specification to the list of Technical Specifications:

### "Section 116625 Gymnasium Equipment"

2. ADD the following sentence after the first sentence of scope item no. 4:

"The exterior basketball hoops are specified in Section 116625."

#### c. CONTRACT A-03 CONCRETE

- 1. DELETE the first sentence of scope item no. 1.a and REPLACE with the following:
  - "a. Provide concrete infill slab at inside the walk-in freezers and refrigerators after freezers and refrigerators have been set in place."
- 2. ADD the following sentence after the first sentence of scope item no. 1.a.:

"Also grout the space between the freezers and refrigerator and the surrounding concrete."

#### d. CONTRACT A-04 MASONRY

- 1. ADD the following new scope item after scope item no. 40 on page 011100-25:
  - "41. 2nd Floor stair tower door frames will be installed after CMU stair towers are erected and 2nd floor slabs are poured. Masonry contractor to include grouting of these frames after stair tower masonry walls are erected."

#### e. CONTRACT A-06 CARPENTRY & GENERAL WORKS

1. ADD the following specification to the list of Technical Specifications:

"Section 102600 Wall Protection"

- 2. DELETE Section 102601 Corner Guards from the list of Technical Specifications.
- 3. DELETE scope item no. 54 on page 011100-33. This contractor does not have any BIM related work.



- 4. ADD the following new scope items after scope item no. 57 on page 011100-33:
  - "58. Install punched frames at 2nd floor stair tower doors.
  - 59. Provide wall protection (including waterjet cut letters) at learning stair seats. Include full-capture metal edges."

#### f. CONTRACT A-07 METAL STUDS & DRYWALL

1. ADD the following specification to the list of Technical Specifications:

"Section 061213 Structural Panel Concrete Subfloor"

- 2. ADD the following new scope item after scope item no. 40 on page 011100-37:
  - "41. Provide cement board underlayment and structural panel concrete subfloor at Learning Stair seats and steps. Include as backer for terrazzo tile on vertical surfaces of steps shown in Detail A1/A-407."

### g. CONTRACT A-10 DOORS, FRAMES AND HARDWARE SUPPLY

- 1. ADD the following new scope item after scope item no. 14 on page 011100-44:
  - "15. Provide punched frames at 2nd floor stair tower doors."

### h. CONTRACT A-17 TERRAZZO TILE

- 1. ADD the following new scope item after scope item no. 16 on page 011100-59:
  - "17. Provide precast terrazzo treads and risers at learning stair including vertical surfaces as detailed on Sheet A-407."

#### i. CONTRACT A-20 GYMNASIUM EQUIPMENT AND BLEACHERS

- 1. ADD the following new scope item after scope item no. 17 on page 011100-65:
  - "18. The exterior basketball hoops specified in Section 116625 are being provided by Contract A-2 Sitework."

### j. CONTRACT A-27 PLUMBING

- 1. ADD the following new scope items after scope item no. 33 on page 011100-81:
  - "34. Before ANY excavation work is to commence, the Contractor/Excavator shall contact the utility companies or utility owners and advise them of the proposed work and ask them to mark the location of the underground utility installations. This notification shall be done within established or customary local response times. If the work is on private property and the utility company will not mark out the utilities, the Contractor/Excavator will hire a private locating service to mark the utilities. Once the utilities are located and marked, the Contractor/Excavator will excavate by hand or use a vacuum truck to expose the utilities and



record the exact location and elevation of the utilities. The Contractor/Excavator must submit the Excavation Permit to EDiS Company verifying their assurance of communication with the utility companies or utility owners. The Contractor/Excavator must follow State, Local, and Federal Guidelines prior to proceeding with excavations. The Contractor/Excavator will have these marks restored as long as there is work to perform. Once the Contractor has installed new utilities, they will provide to EDiS Company an as-built drawing, within 7 days, showing the exact location and elevation of the utilities. The installing Contractor will be responsible for locating and marking these utilities for other contractors that may have work in the same area."

#### k. CONTRACT A-28 MECHANICAL

- 1. ADD the following new scope items after scope item no. 32 on page 011100-84:
  - "33. Before ANY excavation work is to commence, the Contractor/Excavator shall contact the utility companies or utility owners and advise them of the proposed work and ask them to mark the location of the underground utility installations. This notification shall be done within established or customary local response times. If the work is on private property and the utility company will not mark out the utilities, the Contractor/Excavator will hire a private locating service to mark the utilities. Once the utilities are located and marked, the Contractor/Excavator will excavate by hand or use a vacuum truck to expose the utilities and record the exact location and elevation of the utilities. The Contractor/Excavator must submit the Excavation Permit to EDiS Company verifying their assurance of communication with the utility companies or utility owners. The Contractor/Excavator must follow State, Local, and Federal Guidelines prior to proceeding with excavations. The Contractor/Excavator will have these marks restored as long as there is work to perform. Once the Contractor has installed new utilities, they will provide to EDiS Company an as-built drawing, within 7 days, showing the exact location and elevation of the utilities. The installing Contractor will be responsible for locating and marking these utilities for other contractors that may have work in the same area."
- 3. SECTION 013216: Construction Schedule INSERT the Project Schedule dated 9 April 2020
- 4. SECTION 030506 UNDER-SLAB VAPOR BARRIER

Page 030506-2, Article 2.01, Paragraph B:

Add subparagraph 4:

4. Viper II by ISI Building Products.

## 5. <u>SECTION 042000 – UNIT MASONRY</u>

Page 042000-8, Article 2.02, Paragraph A, subparagraph 2:

Add to subparagraph 2a:

3) Glen Gery Ravenna Redburn

Add to subparagraph 2b:

2) Glen Gery Kokomo Heritage Flashed (darker brown only; cull brick as required)

#### 6. <u>SECTION 061213 – STRUCTURAL PANEL CONCRETE SUBFLOOR</u>

Page 061213-2, Article 2.01, Paragraph A:

Add subparagraph 2:

- 2. Other Approved Manufacturers/Products:
  - a. Megaboard, By Ectek International.

#### 7. <u>SECTION 079513 – EXPANSION JOINT COVER ASSEMBLIES</u>

Page 079513-1, Article 2.01, Paragraph A:

Add subparagraph 5:

5. Balco, Inc.

### 8. SECTION 088000 - GLAZING

a. Insert Section 088000, Revision 0, dated 2/21/2020, attached to this Addendum, into the Project Manual.

### 9. <u>SECTION 123400 – LAMINATE CLAD CASEWORK</u>

Page 123400-2, Article 2.01, Paragraph A:

Change subparagraph 2 to read:

- 2. Subject to compliance with requirements, products of the following manufacturers are also approved:
  - a. Case Systems
  - b. Stevens Industries

### **MODIFICATIONS TO DRAWINGS:**

#### **DRAWINGS – VOLUME 1:**

- 1. <u>DRAWING G-111</u>: Delete Drawing G-111, and replace with Drawing G-111, Revision 1, dated 04/03/2020, attached to this Addendum.
- 2. <u>DRAWING S-004</u>: Delete Drawing S-004, and replace with Drawing S-004, Revision 1, dated 04/03/2020, attached to this Addendum.
- 3. <u>DRAWING S-111</u>: Delete Drawing S-111, and replace with Drawing S-111, Revision 1, dated 04/03/2020, attached to this Addendum.
- 4. <u>DRAWING S-112</u>: Delete Drawing S-112, and replace with Drawing S-112, Revision 1, dated 04/03/2020, attached to this Addendum.
- 5. <u>DRAWING S-113</u>: Delete Drawing S-113, and replace with Drawing S-113, Revision 1, dated 04/03/2020, attached to this Addendum.
- 6. <u>DRAWING S-114</u>: Delete Drawing S-114, and replace with Drawing S-114, Revision 1, dated 04/03/2020, attached to this Addendum.
- 7. <u>DRAWING S-115</u>: Delete Drawing S-115, and replace with Drawing S-115, Revision 1, dated 04/03/2020, attached to this Addendum.
- 8. <u>DRAWING S-121</u>: Delete Drawing S-121, and replace with Drawing S-121, Revision 1, dated 04/03/2020, attached to this Addendum.



- 9. <u>DRAWING S-122</u>: Delete Drawing S-122, and replace with Drawing S-122, Revision 1, dated 04/03/2020, attached to this Addendum.
- 10. <u>DRAWING S-131</u>: Delete Drawing S-131, and replace with Drawing S-131, Revision 1, dated 04/03/2020, attached to this Addendum.
- 11. <u>DRAWING S-132</u>: Delete Drawing S-132, and replace with Drawing S-132, Revision 1, dated 04/03/2020, attached to this Addendum.
- 12. <u>DRAWING S-133</u>: Delete Drawing S-133, and replace with Drawing S-133, Revision 1, dated 04/03/2020, attached to this Addendum.
- 13. <u>DRAWING S-141</u>: Delete Drawing S-141, and replace with Drawing S-141, Revision 1, dated 04/03/2020, attached to this Addendum.
- 14. <u>DRAWING S-202</u>: Delete Drawing S-202, and replace with Drawing S-202, Revision 1, dated 04/03/2020, attached to this Addendum.
- 15. <u>DRAWING S-501</u>: Delete Drawing S-501, and replace with Drawing S-501, Revision 1, dated 04/03/2020, attached to this Addendum.
- 16. <u>DRAWING S-504</u>: Delete Drawing S-504, and replace with Drawing S-504, Revision 1, dated 04/03/2020, attached to this Addendum.
- 17. <u>DRAWING S-505</u>: Delete Drawing S-505, and replace with Drawing S-505, Revision 1, dated 04/03/2020, attached to this Addendum.
- 18. <u>DRAWING S-515</u>: Delete Drawing S-515, and replace with Drawing S-515, Revision 1, dated 04/03/2020, attached to this Addendum.
- 19. <u>DRAWING S-518</u>: Delete Drawing S-518, and replace with Drawing S-518, Revision 1, dated 04/03/2020, attached to this Addendum.
- 20. <u>DRAWING S-519</u>: Delete Drawing S-519, and replace with Drawing S-519, Revision 1, dated 04/03/2020, attached to this Addendum.
- 21. <u>DRAWING S-520</u>: Delete Drawing S-520, and replace with Drawing S-520, Revision 1, dated 04/03/2020, attached to this Addendum.
- 22. <u>DRAWING S-522</u>: Delete Drawing S-522, and replace with Drawing S-522, Revision 1, dated 04/03/2020, attached to this Addendum.
- 23. <u>DRAWING S-523</u>: Delete Drawing S-523, and replace with Drawing S-523, Revision 1, dated 04/03/2020, attached to this Addendum.
- 24. <u>DRAWING S-524</u>: Delete Drawing S-524, and replace with Drawing S-524, Revision 1, dated 04/03/2020, attached to this Addendum.
- 25. <u>DRAWING S-525</u>: Delete Drawing S-525, and replace with Drawing S-525, Revision 1, dated 04/03/2020, attached to this Addendum.
- 26. <u>DRAWING S-526</u>: Delete Drawing S-526, and replace with Drawing S-526, Revision 1, dated 04/03/2020, attached to this Addendum.
- 27. <u>DRAWING A-131</u>: Delete Drawing A-131, and replace with Drawing A-131, Revision 1, dated 04/03/2020, attached to this Addendum.
- 28. <u>DRAWING A-143</u>: Delete Drawing A-143, and replace with Drawing A-143, Revision 1, dated 04/03/2020, attached to this Addendum.
- 29. <u>DRAWING A-312</u>: Delete Drawing A-312, and replace with Drawing A-312, Revision 1, dated 04/03/2020, attached to this Addendum.
- 30. <u>DRAWING A-324</u>: Delete Drawing A-324, and replace with Drawing A-324, Revision 1, dated 04/03/2020, attached to this Addendum.



- 31. DRAWING A-403: Delete Drawing A-403, and replace with Drawing A-403, Revision 1, dated 04/03/2020, attached to this Addendum.
- 32. DRAWING A-427: Delete Drawing A-427, and replace with Drawing A-427, Revision 1, dated 04/03/2020, attached to this Addendum.
- 33. DRAWING A-434: Delete Drawing A-434, and replace with Drawing A-434, Revision 1, dated 04/03/2020, attached to this Addendum.
- 34. DRAWING A-443: Delete Drawing A-443, and replace with Drawing A-443, Revision 1, dated 04/03/2020, attached to this Addendum.
- 35. DRAWING A-445: Delete Drawing A-445, and replace with Drawing A-445, Revision 1, dated 04/03/2020, attached to this Addendum.
- 36. DRAWING A-449: Delete Drawing A-449, and replace with Drawing A-449, Revision 1, dated 04/03/2020, attached to this Addendum.
- 37. DRAWING A-514: Delete Drawing A-514, and replace with Drawing A-514, Revision 1, dated 04/03/2020, attached to this Addendum.

#### **DRAWINGS - VOLUME 2:**

- 1. <u>DRAWING I-401</u>: Delete Drawing I-401, and replace with Drawing I-401, Revision 1, dated 04/03/2020, attached to this Addendum.
- 2. DRAWING I-601: Delete Drawing I-601, and replace with Drawing I-601, Revision 1, dated 04/03/2020, attached to this Addendum

#### LIST OF ATTACHMENTS:

#### RFI'S

RFI's – 3, 6, 8, 10, 14, 16, 17, 19, 23, 29 & 30.

#### SPECIFICATIONS:

SECTION 088000 - GLAZING, Revision 0, dated 2/21/2020.

### **DRAWINGS – VOLUME 1:**

#### G-111 – FIRST FLOOR CODE REVIEW PLAN

- S-004 PROJECT SCHEDULES
- S-111 FOUNDATION PLAN AREA A
- S-112 FOUNDATION PLAN AREA B
- S-113 FOUNDATION PLAN AREA C
- S-114 FOUNDATION PLAN AREA D
- S-115 FOUNDATION PLAN AREA E
- S-121 SECOND FLOOR FRAMING PLAN AREA A
- S-122 SECOND FLOOR FRAMING PLAN AREA B
- S-131 ROOF FRAMING PLAN AREA A
- S-132 ROOF FRAMING PLAN AREA B
- S-133 ROOF FRAMING PLAN AREA C
- S-141 LIGHTING PLATFORMS

- S-202 PARTIAL PLANS
- S-501 TYPICAL FOUNDATION DETAILS
- S-504 FOUNDATION SECTIONS
- S-505 FOUNDATION SECTIONS
- S-515 FRAMING SECTIONS
- S-518 FRAMING SECTIONS
- S-519 FRAMING SECTIONS
- S-520 FRAMING SECTIONS
- S-522 FRAMING SECTIONS
- S-523 FRAMING SECTIONS
- S-524 FRAMING SECTIONS
- S-525 FRAMING SECTIONS
- S-526 FRAMING SECTIONS
- A-131 OVERALL ROOF PLAN
- A-143 FIRST FLOOR REFLECTED CEILING AREA 'C'
- A-312 BUILDING SECTIONS
- A-324 WALL SECTIONS
- A-403 ENLARGED PLANS
- A-427 AUDITORIUM SEATING PLAN
- A-434 ELEVATOR, LIFT, AUD. STAIRS AND RAMP
- A-443 CASEWORK ELEVATIONS FIRST LEVEL E
- A-445 CASEWORK ELEVATIONS SECOND LEVEL B
- A-449 CASEWORK SECTION
- A-514 EXTERIOR SECTION DETAILS

#### DRAWINGS - VOLUME 2:

- I-401 INTERIOR ELEVATIONS
- I-601 FINISH SCHEDULE

## End of Addendum No. 3

110 South Poplar Street • Suite 400 • Wilmington, DE 19801



TO:	SETH HAMMONDS, ABHA	PRE-BID RFI#:003
FROM:	ANDREW HICKEY, EDIS COMPAN	NY DATE: 23 MARCH 2020
PROJECT: <u>EVE</u>	RETT MEREDITH MIDDLE SCHOOL	<u>L</u>
DWG. # / DETA	IL:SPEC. SECTIONS:	092116PAGE:
REQUEST:		
Submitted By:	Narissa Building Company	Date: 23 March 2020
,	on 09 Finishes 092116 Gypsum Boa specification.	ard Assemblies 1 – 9 Is missing from the
RESPONSE:		
1.) Section no 2.	ເ 092116 was not printed correctly.	. See Section 092116 attached to Addendum
Response By:	Scott Lester, ABHA	Date: <u>27 March 2020</u>



TO:	EDIS COMPAN	Y	_ I	PRE-BID RFI#:	006
FROM:	ANDREW HICE	KEY, EDIS COMPANY	_ DA1	ΓΕ: <u>23 MARCH 202</u>	<u>0</u>
PROJE	CT: <u>EVERETT MEREDIT</u>	H MIDDLE SCHOOL	_		
DWG.	# / DETAIL:	SPEC. SECTIONS:	P	AGE:	
REQUI	EST:				
Submit	ted By: <u>EDiS Compar</u>	ny	Date: 23 Marc	ch 2020_	
1.)	Can the existing fire h	ydrants be used for te	mporary water	and dust control	?
RESPO	DNSE:				
1.)	The Town of Middleto and dust control. A ba the Town. The bill wil	ckflow preventer and	meter will be f	-	2
Respon	se By: <u>Chris N</u>	McCone, EDiS Company	Date: _	3/23/2020	



TO:	TED WILLIAN	MS, LANDMARK		PRE-BID RFI#:	008
FROM:	ANDREW HIG	CKEY, EDIS COMPAN	<u>IY</u>	DATE: 24 MARCH 20	) <u>20</u>
PROJECT: EVI	ERETT MERED	TH MIDDLE SCHOO	<u>L</u>		
DWG. # / DETA	AIL:	_SPEC. SECTIONS:_		PAGE:	
REQUEST:					
Submitted By:	EDiS Comp	any	Date:	24 March 2020	

- 1.) Dwg C100 there is an existing utility pole shown to be relocated. Provide clarification on the new location of this pole; who is responsible for relocating the pole?; and who will pay for the relocation? Comment changed to state "Existing utility pole to remain and guy wires to be relocated by other as needed. Contractor shall coordinate with Town of Middletown."
- 2.) Dwg C100 there is a note to relocate the existing shed onto proposed concrete pad. Confirm this is the Tool Shed (NIC) shown on A-113 being installed on the new concrete turned down slab S3A on Dwg S-113. Callout now states "Existing shed to be located onto proposed concrete pad by others. Contractor to coordinate with Appoquinimink School District for new location."
- 3.) Dwg C101 show the existing fence along Priscilla Street "To be replaced along property line". There is no relocated or new fence shown on dwg C111. Provide clarification on what is to be done with this fence. Callouts added in these areas stating "Existing fence to be removed along property line within this area".
- 4.) Dwg C101 the existing gas meter on the backside of the gymnasium is shown to be removed. What is to be done with the associated underground gas piping? Callout now states "Existing gas meter to be removed. Underground piping to be cut at service tap and removed as necessary."
- 5.) Dwg C103 shows 35 Memorial Bricks at the Field House to be saved and relocated. There is nothing on the plans showing where these are to be installed. Provide direction. Callout now states "The 35 memorial bricks are to be saved and given to the Appoquinimink School District."
- 6.) Dwg C103 shows the existing storm pipes on the south side of the Field House to be replaced. Dwg C123 shows the new storm pipes and structures. What is to be done with the existing pipes and structures? Callout is added pointing to the three pipes stating "Existing three (3) storm pipes shall be abandoned in-place and plugged with masonry. Contractor shall remove storm pipes as necessary with conflict of new construction."
- 7.) Dwg C110 can you confirm that the 6" sanitary line's inverts between CO#2 and CO#8, upstream of the grease trap, don't conflict with the 3" waterline or the dual temp lines



- shown on ME-171. Callout added stating "Sanitary cleanout elevation at 3" water line crossing: 55.73. Contractor to ensure a minimum of 6" clearance between top and bottom of crossing pipes." Same callout added to Sheet C141.
- 8.) Dwg C110 the label on the pipe between Existing CB#2 and Proposed CB#3 is covered by the note "Approximate location of (2) existing water lines...". Provide information on the pipe. Is this pipe existing or new? Callout changed to state "Approximate location of (2) existing water lines. Contractor shall field verify location and depth at all areas of new utility crossings." Same callout added to Sheet C111.
- 9.) Dwg C111 there is a note on Broad Street, "Variable width strip established for State of Delaware". What does this mean? Is there work for a contractor? Callout changed to state "Variable width strip for DelDOT right-of-way dedication established for the State of Delaware." Same callout changed on Sheet C111.
- 10.)Dwg C120 C123 Are the grades at the curbs the top or bottom of the curbs?Spot elevation is added to legend on Sheet C001.Boxed callout on each Sheets C120 through C123 stating:"Note:
  - 1. All spot elevation are bottom of curb unless otherwise stated.
  - 2. Proposed curbing not within DelDOT right-of-way to be modified Type 1-6 P.C.C curb. Within DelDOT right=of-way to be Type 1-8 P.C.C curb. See detail on Sheet C500."
- 11.)Dwg C120 Provide grades at the mechanical yard and mechanical yard doors. Spot grades at all doors around mechanic yard already have spot grades. All seven doors are at Elevation 57.50.
- 12.)Dwg C120 The stoned area between the classroom wing and the kitchen/cafeteria shows a finished grade of 57.50 sloping down to 57.0 near the loading dock. Is there sufficient fall in this area? There is a concern of trapping water over time. Show a yard drainage basin be installed? The grassed area falls 0.5 feet over 64 linear feet for a slope of 0.78%. This is adequate for positive drainage.
- 13.)Dwg C120 & C121 Where the grades around the building are 57.0 and higher the through wall flashing will at our above the interior finished floor elevation. Coordinate with the architect to ensure this is acceptable. Proposed grades in this area cannot be lowered. Coordinate with architect to make sure design of wall flashing is adequate.//
- 14.)Dwg C120 Main Entrance Can you provide a larger scale drawing showing the grades at the sidewalks, ramps and stairs to the main entrance of the school. The scale of this drawing is too small to read. An inset was added on Sheet C120 showing the proposed entrance and spot grades.
- 15.)Dwg C120 Provide grades on the new curbs and handicap ramps at Berkman Street. Callout added stating "See entrance plans for spot grades within these areas"
- **16**.)Dwg C141 provide the invert of the 6" sanitary lateral at the gym. The invert at the new MH#3 is 51.95. Callout added stating invert at building
- 17.)Dwg C142 provide the invert of the 6" sanitary lateral #5 at the building. The invert at the existing manhole is 49.14. Callout added stating invert at building



- 18.)Dwg C500 there is a downspout boot connection detail. There are no downspouts shown on the site utility plans. Provide direction of where these downspout boot connections are required. The boot detail has been removed and a note added to the plan to connect to the internal roof drain collection pipe.
- 19.)Dwg C501 Handicap Sign Detail The detail provided is for installation in paved areas. Provide a detail when the signs are installed in grassed areas. The concrete base seems excessive in grassed areas. Handicap Parking Stall Sign note #4 added stating "For handicapped signs installed within grassed areas, concrete footer is not required.
- 20.)Dwg C501 Bike Rack Detail The notes indicate multiple finish options. Need to provide clear direction on which options the contractors are to price. Also need to provide other acceptable manufacturers. Callout changed stating "10 bike racks with powder coated finish (color to be selected by owner) to accommodate 20 bicycles. Contractor to use Secure Site Design, L.C.C bike racks or approved equivalent."
- 21.)Dwg C503 has a detail for a 1000 gallon grease interceptor made of concrete. Dwg P-502 also has a detail for a 1000 gallon grease interceptor made of steel. Which detail is to be followed? The Town of Middletown Sewer Specifications require a pre-cast concrete grease trap (interceptor). Steel is not permitted
- 22.)Dwg AD-100, Demolition General Note C states to "Refer to Civil Dwgs for Scope of Basement Demolition. The Civil drawings do not address the basement demolition. Provide clarification. See Callout changed on Sheet C100 stating "7,900 S.F. of 1.5 story, 4' crawl space and foundation to be demolished and backfilled. All basement walls are to be removed in their entirety."

RESPONSE:		
1.) Responses sho	own in RED above. Revised do	ocuments issued in Addendum No. 2
Response By:	Ted C. Williams	_Date: _3/31/2020



TO:	EDIS COMPANY	PRE-BID RFI#:010_
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: <u>25 MARCH 2020</u>
PROJECT: EVE	RETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETA	IL:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Maccari Companies, Inc.	Date: <u>25 March 2020</u>
	wallcovering graphics being supplied by the own? They are TBD.	ner or should we give an allowance
RESPONSE:		
1.) Yes, the	e artwork will be provided by the Architect.	
Response By:	АВНА	_Date:27 Mar 20



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#: 014
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 26 MARCH 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL: C110, C111 SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: <u>EDiS Company</u> Date:	26 March 2020
<ol> <li>Dwg C111 needs to be revised to show our new 8" water valve. The lines inside the water meter vaula attached sketch.</li> <li>Dwg C111 can we reduce the size of the line feeding parking lot from 8" to 6"?</li> <li>Dwgs C110 &amp; C111 is the existing 6" water line sen new EMMS, field house, and APC?</li> <li>Dwg C110 can we reduce the size of the lines feeding side of the site 8" to 6"?</li> </ol>	t should be increased to 8". See ng the fire hydrant in the south rving the campus sufficient for the
RESPONSE:	
1.) Plans have been updated to address these items-	See Addendum No 2
Response By: Scott Lester, ABHA Date:	03 April 2020



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#: <u>016</u>
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 26 MARCH 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: <u>Abacus Sports Installations</u>	Date: <u>26 March 2020</u>
1.) Please see attached substitution request form for Everett Meredith MS. I am proposing that the sprubber flooring supplied by Regupol America lorubber is manufactured overseas in either Italy of manufacturing/shipping delays and backlogging by the Coronavirus. These vulcanized products expensive than the recycled rubber products from	pecification be changed to recycled ocated here in the US. All vulcanized or China and is subject to potential g due to those areas being hit hardest are also typically 2-3 times more
RESPONSE:	
1.) The product submitted as a substitution contain meet the requirements listed in the specification.	
Response By: Scott Lester, ABHA Date	e: <u>03 April 2020</u>



TO:	SETH HAMMONDS, ABHA	PRE-BID RFI#: 017
	ANDREW HICKEY, EDIS COMPANY	
PROJEC	CT: EVERETT MEREDITH MIDDLE SCHOOL	_
DWG. #	# / DETAIL:SPEC. SECTIONS:	123400 PAGE:
REQUE	EST:	
Submit	ted By: <u>Reed Associates</u>	Date: <u>27 March 2020</u>
ŕ	I am contacting you in reference the casewo Middle School. Specifically, I am requesting Casework under sections 123400 Plastic Lar Specialty Casework. Stevens is the same ma project as well as being supplied at the Poly administered by your office. Under the plam casework section the specs	g approval of Stevens Industries minate Casework and section 1235583 mufacturer approved for the Fairview Tech and Woodbridge HS projects
2.)	bid by Modular Concepts. Case Systems do many years. So at this point you only have o	es not and has not been bidding in DE for
RESPO	NSE:	
1.)	Subject to compliance with specification requapproved. See Addendum No. 3.	uirements, Stevens Industries is
Respon	se By: Scott Lester, ABHA	Date:03 April 2020



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#: <u>019</u>
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 30 MARCH 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL: S113 SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: <u>EDiS Company</u>	Date: 30 March 2020
1.) Drawing S113 shows 2 rows of foundations assumed the row closest to column line 26.8 Cafeteria Terrace and the line furthest from alternate. Please confirm.	is the base bid for Alternate 5B Enlarged
RESPONSE:	
1.) Correct, see Addendum #3 issue.	
Response By: Scott Lester, ABHA	Date:03 April 2020



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#: 023
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 31 MARCH 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Brandywine Contractors	Date: 31 March 2020
1.) Attached are the Balco Details, Tech Data, Expan Comparison spreadsheet.	nsion Control Spec, and the EJC
RESPONSE:	
1.) Balco is an acceptable manufacturer. See Adde	ndum No 3.
Response By: Scott Lester, ABHA	Date: <u>03 April 2020</u>



TO: SETH HAMMON	NDS, ABHA	P	RE-BID RFI#:	029
FROM: ANDREY	W HICKEY, EDIS COMPANY	_ DAT	E: <u>02 APRIL 2020</u>	
PROJECT: EVERETT ME	EREDITH MIDDLE SCHOOL	_		
DWG. # / DETAIL:	SPEC. SECTIONS:	PA	AGE:	
REQUEST:				
Submitted By: AllGla	ass Systems LLC.	Date: _	02 April 2020	
1.) I'm not seeing a where I can find	a glazing spec in the project d this?	manual. Can soi	neone please let	me know
RESPONSE:				
1.) Section 088000 No 3 for this Se	was inadvertently omitted f	rom the Project 1	Manual. See Ado	dendum
Response By:	Scott Lester, ABHA	Date:	03 April 2020	



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#: 030
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>02 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: <u>Ectek International Inc.</u>	Date: <u>02 April 2020</u>

- 1.) I have submitted a formal request for substitution to Mr. Scott Lester. MegaBoard is UL and ICC-ES certified. Megaboard has 36 UL listed floor/roof assemblies.
- 2.) Here are some basic financial analysis for the substitution:
  - a. USG structural panel MSRP is \$4.5/SF.
  - b. Megaboard structural cement board MSRP is \$2.25~2.5/SF.
  - c. The saving on the material itself is going to be more than \$250,000 for a 125,306 SF job.
  - d. Plus 15~ 20% faster construction speed which will save significant amount labour cost (25% less weight, easier and faster cutting, way less dust and breakage).
  - e. When the boards are cut during construction, Megaboard generates 70% less dust than USG structural panel.
  - f. In the past 2.5 years since we started MegaBoard, we did not receive a single complaint.
  - g. We used to be the OEM for Dragon Board which has been active in NYC market for over 15 years.
  - h. We have 1 classroom job going at Ashland, WA, 2 jobs going with Prescient ( student housing at Davis CA and Denver CO), 2 hotel jobs in Atlanta ( Towne Place Suite, Holiday Inn, 1 hotel (Tru Hotel) in VA, 1 emergency health care facility in Appleton, WI, 1 student housing in Fayetteville AR, plus a few modular manufacturers for classrooms and others.



# **RESPONSE:**

Response By:	Scott Lester, ABHA	Date:	03 April 2020	
1			-	

Dates: 10/29/19 - 11/4/19



EDiS Everett Meredith Middle School (EMMS) Middle town, New Castle County, Delaware

# **TEST HOLE TABULATION**

TH #	DATE	ACTUAL SIZE, MATERIAL,	OWNER		TY CONI		REF. MARK	UTILITY TOP	UTILITY BOT	MEASURED	MEASURED	WIDTH		BM ELEV.		FACE/DE			GENERA			
111#	DATE	TYPE OF UTILITY	OWNER	GOOD	POOR	OTHR	ELEV. (Feet)	ELEV. (Feet)	ELEV. (Feet)	TOP DEPTH (ft)	BOT DEPTH (ft)	(Inches)	BM#	(Feet)	ASPH.	CONC.	SOIL	FILL	ROCK	SAND	CLAY	OTHR
1	10/28/2019	4" Black Metal Water Pipe	EMMS	X			54.13	50.35	N/A	3.78	N/A	N/A	СВ	54.51			X			X		
2	10/29/2019	6" Black Metal Water Pipe	EMMS	X			55.77	52.11	N/A	3.66	N/A	N/A	СВ	54.51			X			X		
3a	10/29/2019	4" Gray Plastic Communications Conduit	EMMS	X			58.76	55.52	N/A	3.24	N/A	N/A	СВ	54.51			X			X		
3b	10/29/2019	2" Gray Plastic Communications Conduit	EMMS	X			58.77	55.53	N/A	3.24	N/A	N/A	СВ	54.51			X			X		
4	10/29/2019	6" Black Metal Water Pipe	EMMS	X			58.84	54.33	N/A	4.51	N/A	N/A	СВ	54.51			X			X		
5	10/29/2019	2" Yellow Plastic Gas Pipe	EMMS	X			56.38	53.56	N/A	2.82	N/A	N/A	СВ	54.51			X			X		
6	10/29/2019	2" Yellow Plastic Gas Pipe	EMMS	X			57.12	54.60	N/A	2.52	N/A	N/A	СВ	54.51			X			X		
7	10/29/2019	(3) 1" Red with Black Stripes Electric Cables (direct bury)	EMMS	X			56.14	53.22	N/A	2.92	N/A	N/A	СВ	54.27			X			X		
8	10/29/2019	2 ½" Yellow Plstic Gas Pipe	EMMS	X			56.11	54.20	N/A	1.91	N/A	N/A	СВ	54.27			X			X		
9	10/29/2019	4" Black Metal Electric Conduit	EMMS	X			56.01	50.70	N/A	5.31	N/A	N/A	СВ	54.27			X		x	X		
10	10/29/2019	6" Black Metal Water Pipe	EMMS	X			55.26	51.70	N/A	3.56	N/A	N/A	СВ	54.27			X				X	
11	10/29/2019	6" Black Metal Water Pipe	EMMS	X			55.31	51.43	N/A	3.88	N/A	N/A	СВ	54.27			X				X	
12	10/29/2019	10" Black Metal Water Main	EMMS	X			55.41	51.93	N/A	3.48	N/A	N/A	СВ	54.27			X				X	
13	10/29/2019	6" Brown Vitrified Clay Sanitary Sewer Pipe	EMMS	X			55.46	48.56	N/A	6.90	N/A	N/A	СВ	54.27			X				X	
14	10/30/2019	10" Black Metal Water Pipe	EMMS	X			54.38	50.75	N/A	3.63	N/A	N/A	СВ	54.27	3"						X	X
15	10/30/2019	10" Black Metal Water Main	EMMS	X			54.38	50.81	N/A	3.57	N/A	N/A	СВ	54.27	4"						X	X
16				No I	Utility Fo	und; Cle	ared to 9', Could n	ot locate Sanitary So	ewer Pipe		·						X				X	
17	10/30/2019	6" Black Metal Water Pipe	EMMS	X			51.71	48.50	N/A	3.21	N/A	N/A	СВ	54.51			X			X		
18	11/1/2019	(3) ½" Black Sight Lighting Cables (direct bury)	EMMS	X			52.33	50.33	N/A	2.00	N/A	N/A	STMH	55.92			X		X	X		
19	11/1/2019	18" Gray Concrete Storm Drain Pipe	EMMS	X			52.43	48.00	N/A	4.43	N/A	N/A	STMH	55.92			X		X	X		
20a	11/1/2019	2" Gray Electric Conduit	EMMS	X			55.34	53.86	N/A	1.48	N/A	N/A	STMH	55.92			X		X	X		
20b	11/1/2019	(2) 1" Gray Electric Conduits	EMMS	X			55.34	53.86	N/A	1.48	N/A	N/A	STMH	55.92			X		X	X		
21a	11/1/2019	(3) ½" Black Electric Cables (direct bury)	EMMS	X			55.27	53.60	N/A	1.67	N/A	N/A	STMH	55.92			X		X	X		
21b	11/1/2019	1/4" Black Electric Cable (direct bury)	EMMS	X			55.27	53.60	N/A	1.67	N/A	N/A	STMH	55.92			X		X	X		
22	11/4/2019	10' Diameter Dry Well (per information given by the client)	EMMS	X			55.65	41.65	N/A	14.00	N/A	N/A	СВ	54.51			X		X	X		
		by the chefft)								11.00	1 1/11											

Prepared By: ATS\_\_\_\_\_ Checked By: TH\_\_\_\_\_

Date: 11/5/19\_\_\_\_

SoftDig #: 196140

Dates: 10/29/19 - 11/4/19

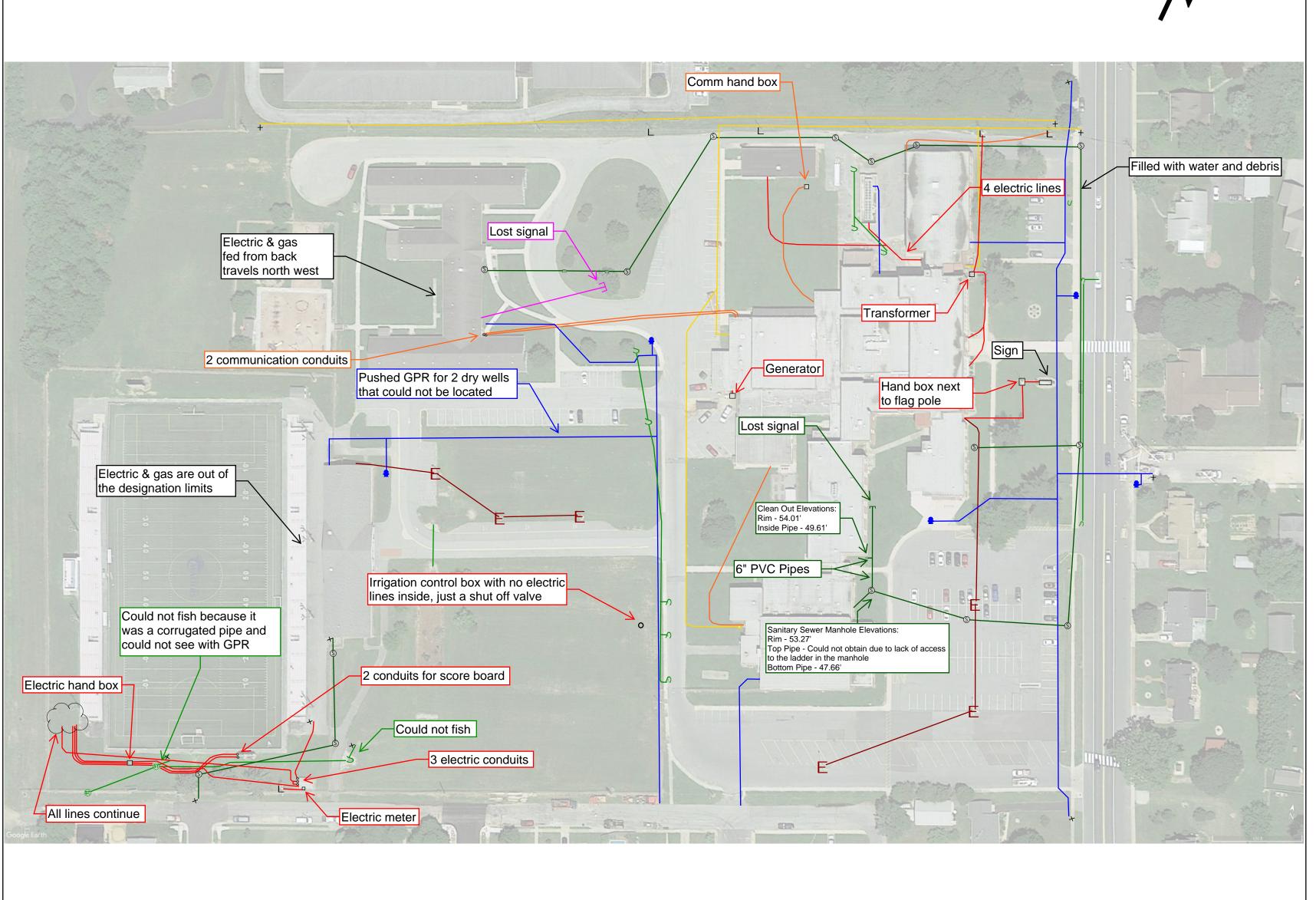


EDIS Everett Meredith Middle School (EMMS) Middle town, New Castle County, Delaware

# **TEST HOLE TABULATION**

Prepared By: ATS\_\_\_\_\_\_ Checked By: TH\_\_\_\_\_ Date: 11/5/19\_\_\_\_\_





**SoftDig.**Underground Services Inc.

1 - 877 - SoftDig

softdig@softdig.com

www.softdig.com

Utility Locating / Vacuum Excavation Subsurface Utility Engineering / GPR Investigations Video Pipe Inspection / Concrete Slab Imaging

Site and Location

# Color Codes

- Electric Power lines, Cables, Conduit, and Lighting Cables
- Gas, Oil, Steam, Petroleum, or Gaseous Material
- Communication, Alarm or Signal Lines, Cables, Conduit, and Fiber Optic
- Potable Water and Fire Suppression
- Sewers, Drain Lines, and Force Mains
- Unknown/Unidentified Facilities
- Reclaimed Water, Irrigation, and Slurry Lines

# Symbols

- Site light pole
- Utility pole
- Sanitary sewer manhole
- Clean out
- Storm drain manhole
- Catch basin
- Fire hydrant Water valve
- Line continues
- Gas Meter

# Clarifications

ALL FIELD SKETCHES ARE NOT TO SCALE AND ARE FOR RELATIVE LOCATION PURPOSES ONLY. SOFTDIG EXERCISES ITS BEST PROFFESIONAL EXPERTISE & GEOPHYSICAL PROSPECTING TECHNIQUES TO DESIGNATE SUBSURFACE UTILTIES MARKED TO CONSTITUTE ALL UTILITIES WITHIN THE PROJECT AREA. PRIOR TO ACTUAL CONSTRUCTION, UTILITES MUST BE SUBSURFACE LOCATED BY SOFTDIG AT POTENTIAL CONFLICT POINTS TO AVOID PERSONAL INJURY AND/OR DAMAGE.

QUALITY LEVEL B: INFORMATION OBTAINED BY THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND HORIZONTAL POSITION OF UTILITIES WITHIN THE PROJECT LIMITS. ALL UTILITES SHOWN EXCEPT AS NOTED.

QUALITY LEVEL C: INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGEMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.

UTILITES DESIGNATED AS QL-C ARE
REPRESENTED BY DASHED LINES. THESE MAY NOT
HAVE CORRESPONDING FIELD MARKS. DEPTH
READINGS SHOWN ARE ESTIMATIONS ONLY. THIS
INFORMATION IS NOT GUARANTEED AND IS NOT TO
BE USED FOR DESIGN OR BASIS FOR
CONSTRUCTION. CLIENTS RELYING ON
INSTRUMENT READINGS DO SO AT THEIR OWN
RISK. TRUE DEPTH IS ONLY OBTAINED BY
EXPOSING THE UTILITY.

QUALITY LEVEL D: INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS

Providing Underground Utility Mapping
Services to the
Eastern United States and Texas

Philadelphia, PA (610) 738-8762

Baltimore, MD (240) 708-8138

San Antonio, TX (210) 908-5668

Houston, TX (713) 597-4480

Client: Date: Project Number: Page of

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.** Underground Services Inc.

# **VACUUM EXCAVATION DATA SHEET**

FAX: (610)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

PHONE NO: (877)SOFTDIG

(763 - 8344)

ENGLISH UNITS		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 1 CLIENT: EDIS	DATE: 10	/28/19
ONE-CALL PERMIT: CREW: T. JOHNSON	TRUCK #:_	164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S B		
GENERAL LOCATION: 504 S BROAD ST  ANTICIPATED UTILITY:		
TEST HOLE INFORMATION		
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 4" BLACK METAL WATER PIPE		
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE		
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER		
TEST HOLE MARKED BY: PK NAIL HUB V X MARK		
PORTION OF UTILITY EXPOSED TOP V HALF SIDE		5
I) REFERENCE ELEVATION 54.13'		
2) UTILITY TOP ELEVATION 50.35'		6
3) UTILITY BOTTOM ELEVATION 3	-	
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		
5) UTILITY TOP DEPTH FROM REFERENCE 3.78'	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE		
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND V CLAY OTHER		
BENCHMARK ELEVATION: 54.51' DESCRIPTION: CATCH BASIN		
BENCHMARK ELEVATION: DESCRIPTION:		
— - — - TEST HOLE PLAN — - — -		
		N.
		אי
Gas Meter	3	1000
		VI-
Catch Basin Swung tied to the corner	7	6253333
Orraing the trib defined		
		(度)
93.5'		理
46.4'	C	
		编
Catala Paris		ほし
Catch Basin		1000
		1945

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

## VACUUM EXCAVATION DATA SHEET

**ENGLISH UNITS** 

SOFTDIG PROJECT #: 196140 TEST HOLE #: 2 CLIENT: EDIS	ATE: 10/29/19
ONE-CALL PERMIT: CREW: T. JOHNSON TE	гиск #: 164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S BRO	
GENERAL LOCATION: IN FRONT OF APPOQUINIMINK PRESCHOOL CENTER ANTICIPATED UTILITY:	
TEST HOLE INFORMATION	
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 6" BLACK METAL WATER PIPE	
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE	
OBSERVED UTILITY CONDITION: GOOD POOR OTHER	
TEST HOLE MARKED BY: PK NAIL HUB V X MARK	
PORTION OF UTILITY EXPOSED TOP  HALF SIDE	
I) Reference Elevation 55.77'	
2) UTILITY TOP ELEVATION 52.II'	6
3) UTILITY BOTTOM ELEVATION 3	
4) WIDTH TYPE: FORMED ROUGH POUR RACKED	
5) UTILITY TOP DEPTH FROM REFERENCE 3.66'	<del>}</del>
6) UTILITY BOTTOM DEPTH FROM REFERENCE	
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND V CLAY OTHER	
BENCHMARK ELEVATION: 54.51' DESCRIPTION: CATCH BASIN	
BENCHMARK ELEVATION: DESCRIPTION:	
— - — - TEST HOLE PLAN — - — -	
	_
	Ńι
	-'N
Catch Basin	
30.0'	
TH 2	
36.3'	
Water Valve	mail Laurice
102.6'	1
Site Light Pole	
- Site Light Fole	

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

# VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 3A CLIENT: EDIS	DATE: 10	/29/19
ONE-CALL PERMIT: CREW: T. JOHNSON	TRUCK #:	164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S I	BROAD ST	
GENERAL LOCATION: IN FRONT OF APPOQUINIMINK PRESCHOOL CENTER  ANTICIPATED UTILITY:		
TEST HOLE INFORMATION		
Actual Size, Color, Material, Type of Utility 4" Gray Plastic Communications Conduit		
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: ORANGE		
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER		
TEST HOLE MARKED BY: PK NAIL HUB V X MARK		
PORTION OF UTILITY EXPOSED TOP  HALF SIDE		5
I) Reference Elevation 58.76'		
2) UTILITY TOP ELEVATION 55.52'		6
3) UTILITY BOTTOM ELEVATION 3		
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		
5) UTILITY TOP DEPTH FROM REFERENCE 3.24'	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE		
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND V CLAY OTHER		
BENCHMARK ELEVATION: 54.51' DESCRIPTION: CATCH BASIN		
BENCHMARK ELEVATION: DESCRIPTION:		
— - — - TEST HOLE PLAN — - — -		
		Λi
	Barrier St.	11
	111000	
Sanitary Sewer Man	hole	
111.2'		
TH 3a	Transaction Co.	
Fire Hydran		
K K	1 3	
124.6'		
	0. 1-	

Water Valve

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.** Underground Services Inc.

# **VACUUM EXCAVATION DATA SHEET**

**ENGLISH UNITS** 

(763 - 8344)FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

PHONE NO: (877)SOFTDIG

SOFTDIG PROJECT #: 196140 TE	ST HOLE #: 3B CLI	ENT: EDIS		DATE: 10/29	)/19
ONE-CALL PERMIT:	Crew:	T. Johnso	N	TRUCK #:	64
CITY / COUNTY / STATE: MIDDLETOWN,	NEW CASTLE COUNTY	y, Delaware	ROAD:SE	BROAD ST	
GENERAL LOCATION: IN FRONT OF APPO	QUINIMINK PRESCHOOL	CENTER	ANTICIPATED UTILITY:		
	TEST HOL	LE INFORMATION — -			
ACTUAL SIZE, COLOR, MATERIAL, TYPE O	F UTILITY <u>2" GRAY P</u>	LASTIC COMMUNICATION	ONS CONDUIT		
UTILITY OWNER: EVERETT ME	<u>REDITH MIDDLE SCHOO</u>	DESIGNATIO	N COLOR: ORANGE		
OBSERVED UTILITY CONDITION: GO	ood 🗸 Poor	OTHER			
TEST HOLE MARKED BY: PK 1	NAIL HUB	X MARK			<u></u>
PORTION OF UTILITY EXPOSED TO	P HALF	SIDE			2
I) REFERENCE ELEVATION	58.76'		2 0		
2) UTILITY TOP ELEVATION	55.52'				6 .l.
3) UTILITY BOTTOM ELEVATION			3	-	V
4) WIDTH TYPE: FORMED	Rough Pour	RACKED			
5) UTILITY TOP DEPTH FROM REFERENCE	3.24'		<del></del> 4	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERE				<u> </u>	
SURFACE COVERING TYPE: ASPHALT	CONCRETESOI	L SURFACE C	OVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FI	LL Rock	SAND 🗸 CLA	Y OTHER		
BENCHMARK ELEVATION: 54.51'	Description: CAT	CH BASIN			
BENCHMARK ELEVATION:	<del></del>				
	— - — - — TEST	HOLE PLAN — - — -	· <b>–</b>		



PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (6]0)696-7864

# EMAIL: SOFTDIG@SOFTDIG.COM

# VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS

Complete Program # 1041/0 Then House # / Complete PDIC		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 4 CLIENT: EDIS	DATE:	0/29/19
ONE-CALL PERMIT: CREW: T. JOHNSON	TRUCK #:	164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S I	Broad ST	
GENERAL LOCATION: IN FRONT OF APPOQUINIMINK PRESCHOOL CENTER ANTICIPATED UTILITY:		
TEST HOLE INFORMATION		
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 6" BLACK METAL WATER PIPE		
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE		
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER		
TEST HOLE MARKED BY: PK NAIL HUB V X MARK		<b>□ 1 1 1 1 1 1 1 1 1 1</b>
PORTION OF UTILITY EXPOSED TOP  HALF SIDE SIDE		5
I) REFERENCE ELEVATION 58.84'		
2) UTILITY TOP ELEVATION 54.33'		6
3) UTILITY BOTTOM ELEVATION 3		<u> </u>
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		
5) UTILITY TOP DEPTH FROM REFERENCE 4.51'	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE	I	
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER		
BENCHMARK ELEVATION: 54.51' DESCRIPTION: CATCH BASIN		
BENCHMARK ELEVATION: DESCRIPTION:		
— - — - — TEST HOLE PLAN — - — -		
	_	Ŵ
Sanitary Sewer Manh	nole	Ť.
	nt	₩.

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (6|0)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

## VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 5 CLIENT: EDIS	DATE:	10/29/19
One-Call Permit: Crew: T. Johnson	TRUCK #	164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S E		
GENERAL LOCATION: NEAR THE SCHOOL'S STORAGE BUILDING  ANTICIPATED UTILITY:		
TEST HOLE INFORMATION		
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 2" YELLOW PLASTIC GAS PIPE		
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: YELLOW		
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER		
TEST HOLE MARKED BY: PK NAIL HUB V X MARK		
PORTION OF UTILITY EXPOSED TOP  HALF SIDE		5
I) REFERENCE ELEVATION 56.38'		
2) UTILITY TOP ELEVATION 53.56'		6
3) UTILITY BOTTOM ELEVATION 3		Ψ
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		]
5) UTILITY TOP DEPTH FROM REFERENCE 2.82'	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE	•	
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:		
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND V CLAY OTHER		
BENCHMARK ELEVATION: 54.51' DESCRIPTION: CATCH BASIN		
BENCHMARK ELEVATION: DESCRIPTION:		
		$\hat{\mathcal{M}}$
	100	
Utility Pole  TH 5  48.5'  The state of the		
Sanitary Sewer Manhole	1	

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

## VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS	
SOFTDIG PROJECT #: 196140 TEST HOLE #: 6 CLIENT: EDIS	DATE: 10/29/19
ONE-CALL PERMIT: CREW: T. JOHNSON	
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S E	
GENERAL LOCATION: NEAR THE SCHOOL'S STORAGE BUILDING  ANTICIPATED UTILITY:	
TEST HOLE INFORMATION	
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 2" YELLOW PLASTIC GAS PIPE	
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: YELLOW	
OBSERVED UTILITY CONDITION: GOOD POOR OTHER	
TEST HOLE MARKED BY: PK NAIL HUB V X MARK	
PORTION OF UTILITY EXPOSED TOP HALF SIDE	5
I) REFERENCE ELEVATION 57.12'	
2) UTILITY TOP ELEVATION 54.60'	6
3) UTILITY BOTTOM ELEVATION 3	<u> </u>
4) WIDTH TYPE: FORMED ROUGH POUR RACKED	
5) UTILITY TOP DEPTH FROM REFERENCE 2.52'	$\rightarrow$
6) UTILITY BOTTOM DEPTH FROM REFERENCE	'
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER	
BENCHMARK ELEVATION: 54.51' DESCRIPTION: CATCH BASIN	
BENCHMARK ELEVATION: DESCRIPTION:	
— - — - TEST HOLE PLAN — - — -	
	J,
	ואי
- ALBORDAN DATE	ARRA B
	日早日 <sub>10</sub> 0
	- Aller
	A STATE OF THE STA
	A CONTRACTOR OF THE
	Tell and the
Utility Pole Utility Pole	
Utility Pole  TH 6  73.3'  TH 6  51'	
16.4'	
$\mathcal{J}^{\circ}$	4 00
Sanitary Sewer Manhole	
	THE RESERVE OF THE PARTY OF THE
	1
	000

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

# VACUUM EXCAVATION DATA SHEET

Fire Hydrant

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (6|0)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

# VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS
SOFTDIG PROJECT #:         196140         Test Hole #:         8         Client:         EDIS         Date:         10/29/19
ONE-CALL PERMIT:          CREW:         T. JOHNSON         TRUCK #:         164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S BROAD ST
GENERAL LOCATION: IN FRONT OF THE SCHOOL NEAR THE ELECTRIC TRANSFORMER ANTICIPATED UTILITY:
——————————————————————————————————————
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 2 1/2" YELLOW PLASTIC GAS PIPE
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: YELLOW
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER
TEST HOLE MARKED BY: PK NAIL HUB V X MARK
PORTION OF UTILITY EXPOSED TOP HALF SIDE
I) REFERENCE ELEVATION 56.II'
2) UTILITY TOP ELEVATION 54.20'
3) UTILITY BOTTOM ELEVATION 3
4) WIDTH TYPE: FORMED ROUGH POUR RACKED
5) UTILITY TOP DEPTH FROM REFERENCE 1.91'
6) UTILITY BOTTOM DEPTH FROM REFERENCE
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER
BENCHMARK ELEVATION: 54.27' DESCRIPTION: CATCH BASIN
BENCHMARK ELEVATION: DESCRIPTION:
— - — - TEST HOLE PLAN — - — -
Nt.
IN .
Water Valve
94.4'
TH 8
9.1
110.6'
Electric Transformer
Liectric Haristoffier

Fire Hydrant

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.** Underground Services Inc.

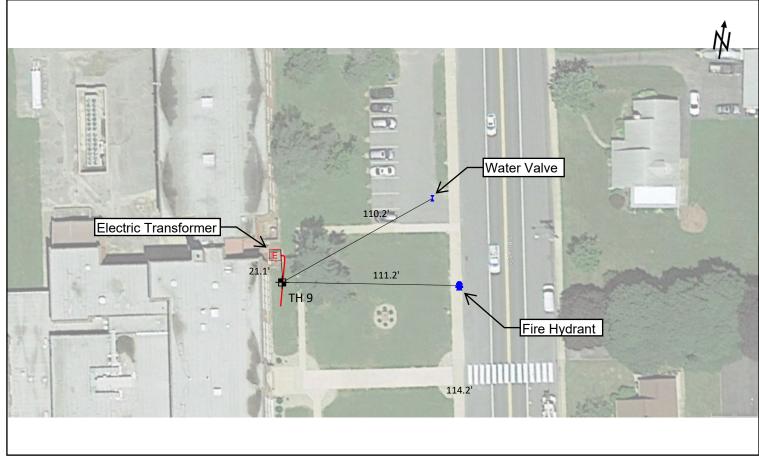
# **VACUUM EXCAVATION DATA SHEET**

ENGLICH LINITS

PHON	IE NO: (877)SOFTDIG
	(763-8344)
	FAX: (6]0)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

ENGLISH UNITS		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 9 CLIENT: EDIS	DATE:	10/29/19
ONE-CALL PERMIT: CREW: T. JOHNSON	TRUCK #:	:164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S B	ROAD ST	<b>-</b> 
GENERAL LOCATION: IN FRONT OF THE SCHOOL NEAR THE ELECTRIC TRANSFORMER ANTICIPATED UTILITY:		
TEST HOLE INFORMATION		
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 4" BLACK METAL ELECTRIC CONDUIT  UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: RED		
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER		
TEST HOLE MARKED BY:  PK NAIL HUB  X MARK		T 5
PORTION OF UTILITY EXPOSED TOP  HALF SIDE 2		<u>↓</u>
I) REFERENCE ELEVATION 56.01'		6
2) UTILITY TOP ELEVATION 50.70'		
3) UTILITY BOTTOM ELEVATION		
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		]
5) UTILITY TOP DEPTH FROM REFERENCE5.31'	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE		
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK 🗹 SAND 🗹 CLAY OTHER		
Benchmark Elevation: 54.27' Description: <u>CATCH BASIN</u>		
Benchmark Elevation: Description:		
TEST HOLE PLAN		
		Ŵ



PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

(763-8344) FAX: (610)696-7864

# EMAIL: SOFTDIG@SOFTDIG.COM

# VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 10 CLIENT: EDIS	DATE:	0/29/19
ONE-CALL PERMIT: CREW: D. POWELL	TRUCK #:	186
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S		
GENERAL LOCATION: IN GRASS ALONG S BROAD ST NEAR THE SCHOOL'S FLAG POLE ANTICIPATED UTILITY:		
TEST HOLE INFORMATION		
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 6" BLACK METAL WATER PIPE		
UTILITY OWNER:EVERETT MEREDITH MIDDLE SCHOOLDESIGNATION COLOR: BLUE		
OBSERVED UTILITY CONDITION: GOOD POOR OTHER		
TEST HOLE MARKED BY: PK NAIL HUB V X MARK X		
PORTION OF UTILITY EXPOSED TOP HALF SIDE		5
I) REFERENCE ELEVATION 55.26'		
2) UTILITY TOP ELEVATION 51.70'		6
3) UTILITY BOTTOM ELEVATION 3		
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		
5) UTILITY TOP DEPTH FROM REFERENCE	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE	·	
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY V OTHER		
BENCHMARK ELEVATION: 54.27 DESCRIPTION: CATCH BASIN		
BENCHMARK ELEVATION: DESCRIPTION:		
TEST HOLE PLAN		
		4
		Ŵ
	4 - 4	
	THE CE	
	300	
Wester Value		
Water Valve	87	-
36'	100	
	-	1
TH 10	-	
140.41		
140.1' 31.8'		
Fire Hydrant Catch Basin		2.5
The state of the s		

CEL

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.** Underground Services Inc.

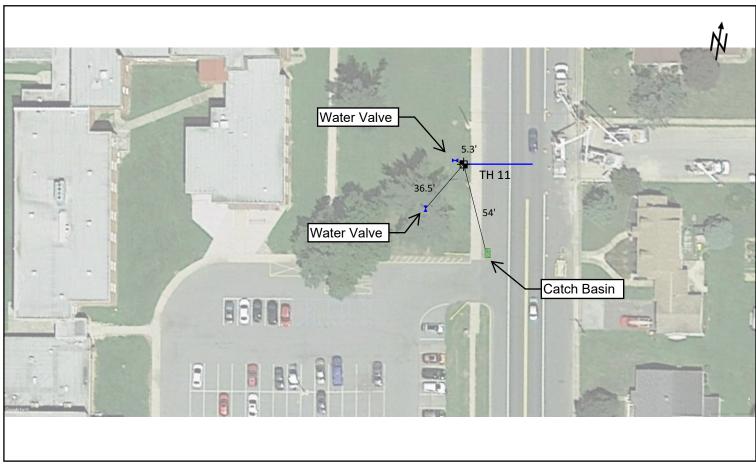
(763 - 8344)FAX: (610)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

PHONE NO: (877)SOFTDIG

### **VACUUM EXCAVATION DATA SHEET ENGLISH UNITS**

SOFTDIG PROJECT #: 196140 TEST HOLE #: 11 CLIENT: EDIS	DATE: 10/29/19
ONE-CALL PERMIT: CREW: D. POWELL	Truck #: 186
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S E	
GENERAL LOCATION: IN GRASS ALONG S BROAD ST NEAR THE SCHOOL'S FLAG POLE ANTICIPATED UTILITY:	
TEST HOLE INFORMATION	
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 6" BLACK METAL WATER PIPE	
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE	
OBSERVED UTILITY CONDITION: GOOD POOR OTHER	
TEST HOLE MARKED BY: PK NAIL HUB V X MARK	<b></b>
PORTION OF UTILITY EXPOSED TOP HALF SIDE	5
I) REFERENCE ELEVATION 55.31'	<del></del>
2) UTILITY TOP ELEVATION 51.43'	6
3) UTILITY BOTTOM ELEVATION 3	<u> </u>
4) WIDTH TYPE: FORMED ROUGH POUR RACKED	
5) UTILITY TOP DEPTH FROM REFERENCE 3.88'	$\rightarrow$
6) UTILITY BOTTOM DEPTH FROM REFERENCE	!
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY V OTHER	
BENCHMARK ELEVATION: 54.27 DESCRIPTION: CATCH BASIN	
BENCHMARK ELEVATION: DESCRIPTION:	
— - — - TEST HOLE PLAN — - — -	



PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# Underground Services Inc.

# VACIJIM EXCAVATION DATA SHEET

(763 - 8344)FAX: (610)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

PHONE NO: (877)SOFTDIG

ENGLISH UNITS		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 12 CLIENT: EDIS	Date:	10/29/19
ONE-CALL PERMIT: CREW: D. POWELL	TRUCK #	: 186
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S B		
GENERAL LOCATION: IN GRASS ALONG S BROAD ST NEAR THE SCHOOL'S FLAG POLE ANTICIPATED UTILITY:		
——————————————————————————————————————		
Actual Size, Color, Material, Type of Utility <u>10" Black Metal Water Main</u>		
JTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE		
OBSERVED UTILITY CONDITION: GOOD 🗸 POOR OTHER		
TEST HOLE MARKED BY: PK NAIL HUB 🗹 X MARK		<b> </b>
PORTION OF UTILITY EXPOSED TOP V HALF SIDE		5
) REFERENCE ELEVATION 55.41'		
2) UTILITY TOP ELEVATION 51.93'		6
3) UTILITY BOTTOM ELEVATION 3 →		<u> </u>
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		]
5) UTILITY TOP DEPTH FROM REFERENCE3.48'	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE	1	
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL V SURFACE COVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY 🗸 OTHER		
BENCHMARK ELEVATION: 54.27' DESCRIPTION: CATCH BASIN		
BENCHMARK ELEVATION: DESCRIPTION:		
TEST HOLE PLAN		
TH 12 2.5' Water Valve 54.6'		

Fire Hydrant

E

Catch Basin

OFFICES IN: PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON

WWW.SOFTDIG.COM

**SoftDig.**Underground Services Inc.

## VACUUM EXCAVATION DATA SHEET

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

NGLISH LINITS

ENGLISH UNITS	
SOFTDIG PROJECT #: 196140 TEST HOLE #: 13 CLIENT: EDIS	DATE: 10/29/19
ONE-CALL PERMIT: CREW: D. POWELL	TRUCK #: 186
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S	Broad ST
GENERAL LOCATION: IN GRASS ALONG S BROAD ST NEAR THE SCHOOL'S FLAG POLE ANTICIPATED UTILITY:	
— - — - TEST HOLE INFORMATION — - — -	
Actual Size, Color, Material, Type of Utility 6" Brown Vitrified Clay Sanitary Sewer Pipe	
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: GREEN	
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER	
TEST HOLE MARKED BY: PK NAIL HUB V X MARK	
PORTION OF UTILITY EXPOSED TOP HALF SIDE	5
1) Reference Elevation 55.46'	
2) UTILITY TOP ELEVATION 48.56'	6
3) UTILITY BOTTOM ELEVATION 3	
4) WIDTH TYPE: FORMED ROUGH POUR RACKED	
5) UTILITY TOP DEPTH FROM REFERENCE6.90'	$\rightarrow$
6) UTILITY BOTTOM DEPTH FROM REFERENCE	·
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY V OTHER	
BENCHMARK ELEVATION: 54.27' DESCRIPTION: CATCH BASIN	
BENCHMARK ELEVATION: DESCRIPTION:	
— - — - TEST HOLE PLAN — - — -	
	A A
Flag Pole Q	th less
89.1'	
09.1	C THE CE
	2500 ABS (A)

TH 13

26.3'

Water Valve

Water Valve

CHECKED BY:\_\_\_\_\_

OFFICES IN: PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON

WWW.SOFTDIG.COM

Underground Services Inc.

# VACUUM EXCAVATION DATA SHEET **ENGLISH UNITS**

PHONE NO: (877)SOFTDIG (763 - 8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

SOFTDIG PROJECT #: 196140 TEST HOLE #: 14 CLIENT: EDIS DATE	<u></u>
ONE-CALL PERMIT: CREW: T. JOHNSON TRUC	ск #:164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: S BROA	D ST
GENERAL LOCATION: IN THE PARKING LOT IN FRONT OF THE SCHOOL ANTICIPATED UTILITY:	
TEST HOLE INFORMATION	
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 10" BLACK METAL WATER PIPE	
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE	
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER	
TEST HOLE MARKED BY: PK NAIL V HUB X MARK	
PORTION OF UTILITY EXPOSED TOP  HALF SIDE	5
I) Reference Elevation 54.38'	
2) UTILITY TOP ELEVATION	6
3) UTILITY BOTTOM ELEVATION 3	
4) WIDTH TYPE: FORMED ROUGH POUR RACKED	
5) UTILITY TOP DEPTH FROM REFERENCE 3.63'	
6) UTILITY BOTTOM DEPTH FROM REFERENCE	
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: A - 4	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY _ OTHER GROUND W.	ATER
BENCHMARK ELEVATION: 54.27' DESCRIPTION: CATCH BASIN	
BENCHMARK ELEVATION: DESCRIPTION:	
TH 14  43.9'	*

Fire Hydrant

OFFICES IN: PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON

WWW.SOFTDIG.COM

**SoftDig.**Underground Services Inc.

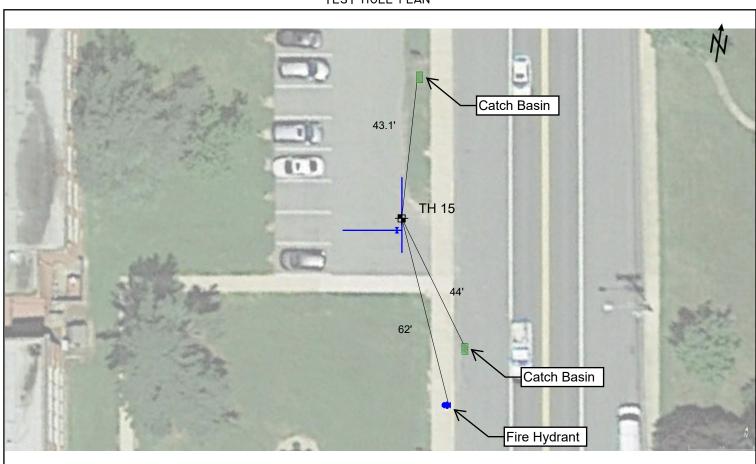
# VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

SOFTDIG PROJECT #: 196140 TEST	Hole #: 15	CLIENT: EDIS		DATE:	0/30/19
ONE-CALL PERMIT:			OHNSON	TRUCK #:	164
CITY / COUNTY / STATE: MIDDLETOWN, N					
GENERAL LOCATION: IN THE PARKING LOT					
		HOLE INFORMATIO			
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF	UTILITY 10" BL	ACK METAL WATER	Main		
UTILITY OWNER: EVERETT MERE	DITH MIDDLE S	CHOOL DESIG	NATION COLOR: BLUE		
OBSERVED UTILITY CONDITION: GOOD	Poor	OTHER			
TEST HOLE MARKED BY: PK NA	IL 🖊 HUB	X MARK			<b>一</b>
PORTION OF UTILITY EXPOSED TOP	✓ HALF	SIDE	_		5
I) REFERENCE ELEVATION	54.38	3'	2		
	50.81				6
3) UTILITY BOTTOM ELEVATION			3 →		<u>V</u>
4) WIDTH TYPE: FORMED	Rough Pour	RACKED			
5) UTILITY TOP DEPTH FROM REFERENCE	3.57'			<b>←</b> —4 <b>→</b>	
6) UTILITY BOTTOM DEPTH FROM REFERENCE	E			' '	
SURFACE COVERING TYPE: ASPHALT	CONCRETE	Soil Surf	ACE COVERING DEPTH:	<u>A - 4</u> IN	
GENERALIZED SOIL PROFILE: SELECT FILL	Rock	SAND	CLAY 🗸 OTH	er Ground Water	
BENCHMARK ELEVATION: 54.27	DESCRIPTION:	CATCH BASIN			
BENCHMARK ELEVATION:	DESCRIPTION:				
		TEST HOLE PLAN —			
					<u> </u>
11 25 11	CONTRACTOR OF THE PARTY OF THE	The state of the s	THE RESERVE TO SERVE THE PERSON NAMED IN	1 2500	NI



PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# Underground Services Inc.

# VACUUM EXCAVATION DATA SHEET

**ENGLISH UNITS** 

(763 - 8344)FAX: (610)696-7864

PHONE NO: (877)SOFTDIG

EMAIL: SOFTDIG@SOFTDIG.COM

SOFTDIG PROJECT #: 196140 TI	EST HOLE #: 16 C	CLIENT: EDIS		DATE:10/	30/19
ONE-CALL PERMIT:	Crew:	T. Johnson	ON	TRUCK #:	164
CITY / COUNTY / STATE: MIDDLETOWN,	NEW CASTLE COUN	ITY, DELAWARE	ROAD:	S BROAD ST	
GENERAL LOCATION: IN THE GRASS NE					
	TEST H	IOLE INFORMATION -			
ACTUAL SIZE, COLOR, MATERIAL, TYPE	of Utility NO Utili	TY FOUND; CLEARED TO	o 9', Could Not Lo	CATE SANITARY	S. PIPE
UTILITY OWNER: EVERETT ME	REDITH MIDDLE SCH	OOL DESIGNATION	ON COLOR: GREEN		
OBSERVED UTILITY CONDITION: G	OOD POOR	OTHER			
TEST HOLE MARKED BY: PK	NAIL HUB	X MARK			コ <u> </u>
PORTION OF UTILITY EXPOSED TO	OP HALF	SIDE	Dı	ug 9'	5
I) REFERENCE ELEVATION			2		
2) UTILITY TOP ELEVATION					6
3) UTILITY BOTTOM ELEVATION			3 →	· -	
4) WIDTH TYPE: FORMED	Rough Pour	RACKED			
5) UTILITY TOP DEPTH FROM REFERENCE		_	<	-4	
6) UTILITY BOTTOM DEPTH FROM REFER	ENCE		· · · · · · · · · · · · · · · · · · ·	1	
SURFACE COVERING TYPE: ASPHALT	CONCRETE	SOIL SURFACE C	Covering Depth:	IN	
GENERALIZED SOIL PROFILE: SELECT F	ILL ROCK	SAND CL	AY OTHER _		
BENCHMARK ELEVATION:	DESCRIPTION:	<u>-</u>			
BENCHMARK ELEVATION:	DESCRIPTION:	-			
		ST HOLE PLAN — - —			
Sanitary Sewer Manhole	TH 32'	4.2'	ean Out		7
		81.5'	Fire Hydrant		

THE T 1813

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864

# M EXCAVATION DATA SHEET EMAIL: SOFTDIG@SOFTDIG.COM

ENGLISH UNITS		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 17 CLIENT: EDIS	DATE: 10	/30/19
ONE-CALL PERMIT: CREW: T. JOHNSON	TRUCK #:	164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: PRIS		
GENERAL LOCATION: SHOULDER OF PRISCILLA ST  ANTICIPATED UTILITY:		
——————————————————————————————————————		
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 6" BLACK METAL WATER PIPE		
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE		
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER		
TEST HOLE MARKED BY: PK NAIL HUB V X MARK		
PORTION OF UTILITY EXPOSED TOP  HALF SIDE		5
I) REFERENCE ELEVATION 51.71'		
2) UTILITY TOP ELEVATION 48.50'		6
3) UTILITY BOTTOM ELEVATION 3		
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		
5) UTILITY TOP DEPTH FROM REFERENCE3.21'	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE	<u>'</u>	
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER		
BENCHMARK ELEVATION: 54.51' DESCRIPTION: CATCH BASIN		
BENCHMARK ELEVATION: DESCRIPTION:		
TEST HOLE PLAN		
		#
Utility Pole  Utility Pole  Utility Pole		
49.1' 64.7'		- 40
Priscilla St		70000
The end of	correction	S. Francisco
THE RESIDENCE OF THE PARTY OF T	BB	-
Water Valve		1

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

### VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS	
SOFTDIG PROJECT #: 196140 TEST HOLE #: 18 CLIENT: EDIS	DATE:   / / 9
ONE-CALL PERMIT: CREW: T. JOHNSON	Truck #: 164
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD:	
GENERAL LOCATION: IN FRONT OF THE FOOTBALL FIELD NEAR THE SHED  ANTICII	
——————————————————————————————————————	
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY (3) 1/2" BLACK SITE LIGHTING CABLES (DIF	RECT BURY)
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: F	RED
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER	
TEST HOLE MARKED BY: PK NAIL HUB V X MARK	
PORTION OF UTILITY EXPOSED TOP  HALF SIDE	5
I) REFERENCE ELEVATION 52.33'	→ 000 <u> </u>
2) UTILITY TOP ELEVATION 50.30'	6
3) UTILITY BOTTOM ELEVATION 3	$\rightarrow$ $ \psi$
4) WIDTH TYPE: FORMED ROUGH POUR RACKED	
5) UTILITY TOP DEPTH FROM REFERENCE	<del>\</del> <del>\</del>
6) UTILITY BOTTOM DEPTH FROM REFERENCE	1 1
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DE	EPTH:IN
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY	OTHER
BENCHMARK ELEVATION: 55.92' DESCRIPTION: STORM DRAIN MANHOLE	
BENCHMARK ELEVATION: DESCRIPTION:	
— TEST HOLE PLAN —	
Utility Pole	N <sub>1</sub>
	'N
	Street
57.4'	
	The second second
Sanitary Sewer Manhole	
TH 18	
120.1'	
41.7' /	
	1
Utility Pole	The second secon
Priscilla St	
	The state of the s

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.** Underground Services Inc.

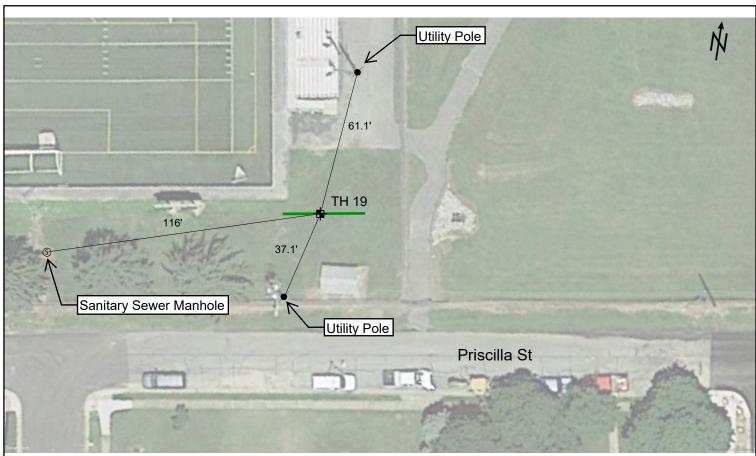
# **VACUUM EXCAVATION DATA SHEET**

**ENGLISH UNITS** 

(763 - 8344)FAX: (610)696-7864

PHONE NO: (877)SOFTDIG

EMAIL: SOFTDIG@SOFTDIG.COM



PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

# **VACUUM EXCAVATION DATA SHEET**

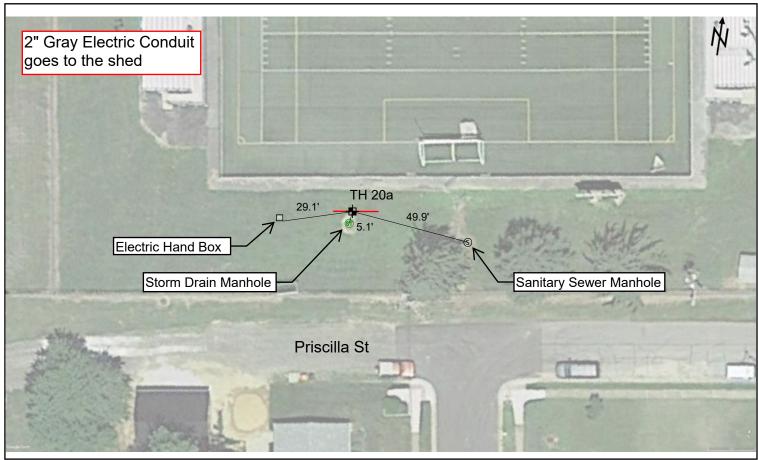
**ENGLISH UNITS** 

(763 - 8344)FAX: (610)696-7864

EMAIL: SOFTDIG@SOFTDIG.COM

PHONE NO: (877)SOFTDIG

SOFTDIG PROJECT #: 196140	) TEST HO	DLE #: <u>20A</u> C	CLIENT: <u>EDIS</u>		DATE: II	/1/19
ONE-CALL PERMIT:	(	CREW:	Т. Јон	HNSON	TRUCK #:	164
CITY / COUNTY / STATE: MIDDL	etown, New	CASTLE COUN	ty, Delaware	ROAD: PRI	SCILLA ST	
GENERAL LOCATION: IN FRONT C	OF THE FOOT	BALL FIELD NE	EAR THE SHED	ANTICIPATED UTILITY:		
		TEST H	OLE INFORMATION			
ACTUAL SIZE, COLOR, MATERIAL,	TYPE OF UT	LITY <u>2" GRAY</u>	ELECTRIC CONDUIT			
UTILITY OWNER: EVER	ETT MEREDIT	H MIDDLE SCH	OOL DESIGN	IATION COLOR: RED		
OBSERVED UTILITY CONDITION:	GOOD		OTHER			
TEST HOLE MARKED BY:	PK NAIL	HuB ✓	X MARK			
PORTION OF UTILITY EXPOSED	Тор	✓ HALF	SIDE			5
I) REFERENCE ELEVATION		55.34'		2 0		
2) UTILITY TOP ELEVATION		53.86'				6
3) UTILITY BOTTOM ELEVATION		<u>-</u>		3		<u>V</u>
4) WIDTH TYPE: FO	RMED	Rough Pour	RACKED			
5) UTILITY TOP DEPTH FROM REI	FERENCE _	1.48'	-	← 4-	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM				·	•	
SURFACE COVERING TYPE: AS	SPHALT	CONCRETE S	OIL SURFAC	ce Cov <u>eri</u> ng Depth:	IN	
GENERALIZED SOIL PROFILE: SE	LECT FILL	Rock 🗸	SAND 🗸	CLAY OTHER		
BENCHMARK ELEVATION: 55	5.92' <u> </u> 1	DESCRIPTION: <u>ST</u>	ORM DRAIN MANHO	LE		
BENCHMARK ELEVATION:	<u></u> [	DESCRIPTION:	-			
		— - — - — TES	ST HOLE PLAN — -			
1						



PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

# VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS		
SOFTDIG PROJECT #: 196140 TEST HOLE #: 20B CLIENT: EDIS	DATE:	11/1/19
ONE-CALL PERMIT: CREW: T. JOHNSON		
CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: PRI		
GENERAL LOCATION: IN FRONT OF THE FOOTBALL FIELD NEAR THE SHED  ANTICIPATED UTILITY:		
TEST HOLE INFORMATION		
ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY (2) I" GRAY ELECTRIC CONDUITS		
UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: RED		
OBSERVED UTILITY CONDITION: GOOD V POOR OTHER		
TEST HOLE MARKED BY: PK NAIL HUB V X MARK		
PORTION OF UTILITY EXPOSED TOP  HALF SIDE		5
1) Reference Elevation 55.34'		
2) UTILITY TOP ELEVATION 53.86'		6
3) UTILITY BOTTOM ELEVATION 3		<u>V</u> _
4) WIDTH TYPE: FORMED ROUGH POUR RACKED		
5) UTILITY TOP DEPTH FROM REFERENCE	$\rightarrow$	
6) UTILITY BOTTOM DEPTH FROM REFERENCE		
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH:	IN	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER		
BENCHMARK ELEVATION: 55.92' DESCRIPTION: STORM DRAIN MANHOLE		
BENCHMARK ELEVATION: DESCRIPTION:		
— - — - TEST HOLE PLAN — - — -		
(2) 1" Gray Electric Conduits go to the scoreboard sign  TH 20b  29.1'  49.9'	<u>A</u>	
Electric Hand Box	Pir I	
Storm Drain Manhole Sanitary Sewer Ma	nhole	-

Priscilla St

PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.**Underground Services Inc.

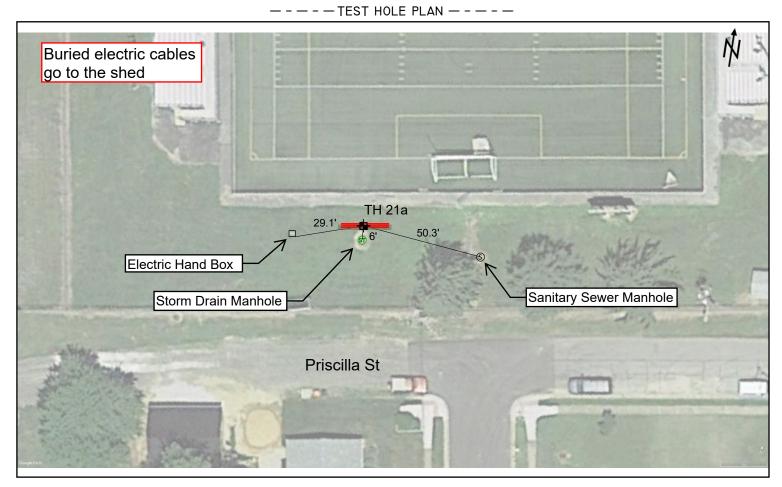
# VACUUM EXCAVATION DATA SHEET

ENGLISH UNITS

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

SOFTDIG PROJECT #: 196140	TEST HOLE #: 21A	_ CLIENT: EDIS		DATE:  / / 9
ONE-CALL PERMIT:	Crew:	T. Jo	HNSON	Truck #:164
CITY / COUNTY / STATE: MIDDLE	TOWN, NEW CASTLE CO	unty, Delaware	ROAD:	Priscilla ST
General Location: IN FRONT OF	THE FOOTBALL FIELD	NEAR THE SHED	ANTICIPATED UTIL	_ITY:
	TEST	HOLE INFORMATION	<del> </del>	
ACTUAL SIZE, COLOR, MATERIAL,	TYPE OF UTILITY (3) 1/2"	BLACK ELECTRIC CA	ABLES (DIRECT BURY)	
JTILITY OWNER:EVERE	TT MEREDITH MIDDLE S	CHOOL DESIG	NATION COLOR: RED	
OBSERVED UTILITY CONDITION:	GOOD POOR	OTHER		
TEST HOLE MARKED BY:	PK NAIL HUB	✓ X MARK		<b></b>
PORTION OF UTILITY EXPOSED	TOP 🗸 HALF	SIDE		5
) REFERENCE ELEVATION	55.27	<u>''</u>	2	000
2) UTILITY TOP ELEVATION	53.60	)'		6
3) UTILITY BOTTOM ELEVATION			3	<u> </u>
4) WIDTH TYPE: FOR	RMED ROUGH POUR	RACKED		
5) UTILITY TOP DEPTH FROM REFE	ERENCE   1.67'		<del>&lt;</del>	-4
6) UTILITY BOTTOM DEPTH FROM F	REFERENCE			<u> </u>
SURFACE COVERING TYPE: ASP	PHALT CONCRETE	SOIL V SURFA	ACE COVERING DEPTH:	IN
GENERALIZED SOIL PROFILE: SEL	ECT FILL ROCK	✓ SAND ✓	CLAY OTHER _	
BENCHMARK ELEVATION:55.	.92' DESCRIPTION:	STORM DRAIN MANHO	OLE	
BENCHMARK ELEVATION:	DESCRIPTION:			



PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON WWW.SOFTDIG.COM

# **SoftDig.** Underground Services Inc.

PHONE NO: (877)SOFTDIG

(763 - 8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

### **VACUUM EXCAVATION DATA SHEET**

**ENGLISH UNITS** 

		LITOLIS	311 011113				
SOFTDIG PROJECT #: 19614	O TEST HOLE #:	21B CLIENT	r: <u>EDIS</u>			DATE:	11/1/19
ONE-CALL PERMIT:						TRUCK #:_	164
CITY / COUNTY / STATE: MIDDL	ETOWN, NEW CAST	LE COUNTY, [	DELAWARE	ROAD:_	Pri	ISCILLA ST	
GENERAL LOCATION: IN FRONT	OF THE FOOTBALL F	FIELD NEAR 7	THE SHED	ANTICIP	ATED UTILITY:		
		TEST HOLE	INFORMATION -				
ACTUAL SIZE, COLOR, MATERIAL	., TYPE OF UTILITY <u>1</u> /	<u>4" Black Elf</u>	<u> ECTRIC CABLE ([</u>	DIRECT BURY)			
UTILITY OWNER:EVER	ETT MEREDITH MIDI	DLE SCHOOL	DESIGNA	TION COLOR: $\overline{\mathbb{R}}$	ED		
OBSERVED UTILITY CONDITION:	GOOD 🗹	Poor	OTHER				
TEST HOLE MARKED BY:	PK NAIL	HUB 🔽	X MARK				
PORTION OF UTILITY EXPOSED	TOP	HALF	SIDE				5
I) REFERENCE ELEVATION		55.27'		2	<b>→</b> 0		
2) UTILITY TOP ELEVATION	!	53.60'					6
3) UTILITY BOTTOM ELEVATION				3	$\longrightarrow$		<u>V</u>
4) WIDTH TYPE: F	ORMED ROUGH	Pour	RACKED				
5) UTILITY TOP DEPTH FROM RE	FERENCE	67'			←—4-	$\longrightarrow$	
6) UTILITY BOTTOM DEPTH FROM	1 REFERENCE				<u> </u>	<u> </u>	
SURFACE COVERING TYPE: A	SPHALTCONCRE	ETE SOIL	✓ SURFACE	E COVERING DE	PTH:	IN	
GENERALIZED SOIL PROFILE: S	ELECT FILL	Rock 🗸	SAND 🗸	CLAY	OTHER		
BENCHMARK ELEVATION:5	5.92' DESCRIF	PTION: STORM	DRAIN MANHOLE	E			
BENCHMARK ELEVATION:	DESCRIF	PTION:					
		TEST H	OLE PLAN —				
	The Residence of the Second						4
Buried electric cable	1		-3			-	N-N
goes to the shed	-					3	3
	THE RESERVE AND PARTY AND PARTY AND PARTY AND PARTY AND PARTY.	The same of the sa	at all the decimal with a winter of	THE RESERVE THE PARTY OF THE PA	SEASON STREET, SQUARE,	Contraction (Contraction)	March 11 (11 (12 (12 (12 (12 (12 (12 (12 (12



<u>OFFICES IN:</u> PHILADELPHIA, BALTIMORE, SAN ANTONIO. HOUSTON

WWW.SOFTDIG.COM

**SoftDig.**Underground Services Inc.

# VACUUM EXCAVATION DATA SHEET

**ENGLISH UNITS** 

PHONE NO: (877)SOFTDIG (763-8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

\_\_\_\_\_ DATE: 11/4/19 SOFTDIG PROJECT #: 196140 TEST HOLE #: 22 CLIENT: EDIS ONE-CALL PERMIT: --- CREW: T. JOHNSON TRUCK #: CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD: PRISCILLA ST GENERAL LOCATION: FIELD IN FRONT OF THE FOOTBALL STADIUM BUILDING ANTICIPATED UTILITY: ------- TEST HOLE INFORMATION ----ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 10" DIAMETER DRY WELL (PER INFORMATION GIVEN BY THE CLIENT) UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE OBSERVED UTILITY CONDITION: GOOD 🗸 Poor OTHER TEST HOLE MARKED BY: PK NAIL HUB 🗸 X MARK PORTION OF UTILITY EXPOSED Top HALF SIDE 55.65' I) REFERENCE ELEVATION 41.65 2) UTILITY TOP ELEVATION 3) UTILITY BOTTOM ELEVATION 4) WIDTH --- TYPE: FORMED Rough Pour RACKED 5) UTILITY TOP DEPTH FROM REFERENCE 14.00' 6) UTILITY BOTTOM DEPTH FROM REFERENCE CONCRETE SOIL SURFACE COVERING DEPTH: IN SURFACE COVERING TYPE: ASPHALT

SAND V

CLAY

OTHER

Rock 🗸

DESCRIPTION: ---

DESCRIPTION: CATCH BASIN

Well location dug per measurements off as-built drawings.

Catch Basin

TH 22

61.4'

Water Valve

GENERALIZED SOIL PROFILE: SELECT FILL

BENCHMARK ELEVATION: 55.51'

BENCHMARK ELEVATION: ---

OFFICES IN: PHILADELPHIA, BALTIMORE, SAN ANTONIO, HOUSTON

WWW.SOFTDIG.COM

Underground Services Inc.

# VACUUM EXCAVATION DATA SHEET

**ENGLISH UNITS** 

PHONE NO: (877)SOFTDIG (763 - 8344)

FAX: (610)696-7864 EMAIL: SOFTDIG@SOFTDIG.COM

ONE-CALL PERHIT: CREW. T. JOHNSON TRUCK #: 164 CITY / COUNTY / STATE: MIDDLETOWN, NEW CASTLE COUNTY, DELAWARE ROAD PRISCILLA ST GENERAL LOCATION: FIELD IN FRONT OF THE FOOTBALL STADIUM BUILDING ANTICIPATED UTILITY:  ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 10" DIAMETER DRY WELL (PER INFORMATION OF THE COUNTY OF THE FOOTBALL STADIUM BUILDING ANTICIPATED UTILITY:  ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY 10" DIAMETER DRY WELL (PER INFORMATION GIVEN BY THE CLIENT)  UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL DESIGNATION COLOR: BLUE  OBSERVED UTILITY EXPOSED TO P HALE SIDE SCHOOL DESIGNATION COLOR: BLUE  OSSERVED UTILITY EXPOSED TOP HALE SIDE STADIUM BUILDING ANTICIPATED STATEMENT OF STATEME	SOFTDIG PROJECT #:	196140	_ TEST HOLE #: <u>23</u>	CLIENT: EDIS		DATE:	1/4/19
GENERAL LOCATION: FIELD IN FRONT OF THE FOOTBALL STADIUM BUILDING  TEST HOLE INFORMATION  ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY [0]* DIAMETER DRY WELL (PER INFORMATION GIVEN BY THE CLIENT)  UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL  DESIGNATION COLOR: BLUE  OSSERVED UTILITY CONDITION:  GOOD POOR POOR OTHER  TEST HOLE MARKE BY: PK NAIL  HUB X MARK  PORTION OF UTILITY EXPOSED  1) REFERENCE ELEVATION  2) UTILITY OF ELEVATION  4) WIDTH TYPE: FORMED ROUGH POUR RACKED  5) UTILITY BOTTOM ELEVATION  4) WIDTH TYPE: FORMED ROUGH POUR RACKED  50 UTILITY DOTTOM DEPTH FROM REFERENCE  50 UTILITY DOTTOM DEPTH FROM REFERENCE  SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: IN  GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER  BENCHMARK ELEVATION: 55.51' DESCRIPTION: CATCH BASIN  BENCHMARK ELEVATION: TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve					OHNSON	TRUCK #:_	164
GENERAL LOCATION: FIELD IN FRONT OF THE FOOTBALL STADIUM BUILDING  TEST HOLE INFORMATION  ACTUAL SIZE, COLOR, MATERIAL, TYPE OF UTILITY [0]* DIAMETER DRY WELL (PER INFORMATION GIVEN BY THE CLIENT)  UTILITY OWNER: EVERETT MEREDITH MIDDLE SCHOOL  DESIGNATION COLOR: BLUE  OSSERVED UTILITY CONDITION:  GOOD POOR POOR OTHER  TEST HOLE MARKE BY: PK NAIL  HUB X MARK  PORTION OF UTILITY EXPOSED  1) REFERENCE ELEVATION  2) UTILITY OF ELEVATION  4) WIDTH TYPE: FORMED ROUGH POUR RACKED  5) UTILITY BOTTOM ELEVATION  4) WIDTH TYPE: FORMED ROUGH POUR RACKED  50 UTILITY DOTTOM DEPTH FROM REFERENCE  50 UTILITY DOTTOM DEPTH FROM REFERENCE  SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: IN  GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER  BENCHMARK ELEVATION: 55.51' DESCRIPTION: CATCH BASIN  BENCHMARK ELEVATION: TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	CITY / COUNTY / STATE	: MIDDLETON	WN, NEW CASTLE C	OUNTY, DELAWARE	ROAD:	PRISCILLA ST	
TEST HOLE INFORMATION ————————————————————————————————————	GENERAL LOCATION: FIE	LD IN FRON	T OF THE FOOTBALL	STADIUM BUILDING	ANTICIPATED U	TILITY:	
UTILITY OWNER:  EVERETT MEREDITH MIDDLE SCHOOL  DESIGNATION COLOR: BLUE  DESIGNATION COLOR: BLUE  OBSERVED UTILITY CONDITION:  GOOD  POOR  OTHER  PORTION OF UTILITY EXPOSED  TOP  HALF  SIDE  1 FOR MEREDITH HUB  X MARK  1							
OBSERVED UTILITY CONDITION:  GOOD  POOR  OTHER  TEST HOLE MARKED BY:  PK NAIL  HUB  X MARK  PORTION OF UTILITY EXPOSED  TOP  HALF  SIDE  2  UTILITY TOP ELEVATION  2) UTILITY TOP ELEVATION  4.6.61'  3) UTILITY BOTTOM ELEVATION   4) WIDTH  TYPE: FORMED  6) UTILITY BOTTOM DEPTH FROM REFERENCE  SURFACE COVERING TYPE:  ASPHALT  CONCRETE  SOIL  SOLE  SURFACE COVERING DEPTH:  IN  GENERALIZED SOIL PROFILE:  SELECT FILL  ROCK  SAND  CLAY  OTHER  THE  OTHER  THE  THE  THE  THE  THE  THE  THE	ACTUAL SIZE, COLOR, M.	aterial, Tyi	PE OF UTILITY 10" DI	AMETER DRY WELL (	PER INFORMATION GIVE	N BY THE CLIENT	)
TEST HOLE MARKED BY: PK NAIL HUB X MARK PORTION OF UTILITY EXPOSED TOP HALF SIDE  2) UTILITY TOP ELEVATION 55.51'  2) UTILITY TOP ELEVATION 46.61'  3) UTILITY BOTTOM ELEVATION  4) WIDTH Type: Formed Rough Pour Racked  5) UTILITY BOTTOM DEPTH FROM REFERENCE  50 UTILITY BOTTOM DEPTH FROM REFERENCE  SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: IN  GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CATCH BASIN  BENCHMARK ELEVATION: 55.51' DESCRIPTION:  DESCRIPTION:  TEST HOLE PLAN  TEST HOLE PLAN  THEST HOLE PLAN  THE THOLE PLAN  Walter Valve	UTILITY OWNER:	EVERETT	MEREDITH MIDDLE S	SCHOOL DESIG	GNATION COLOR: BLUE		
PORTION OF UTILITY EXPOSED  TOP  HALF SIDE  1) REFERENCE ELEVATION  55.5!  2) UTILITY TOP ELEVATION  46.6!  3) UTILITY DOP ELEVATION  40.6!  NOUGH POUR  RACKED  NUTITY TOP DEPTH FROM REFERENCE  6) UTILITY BOTTOM DEPTH FROM REFERENCE  SURFACE COVERING TYPE: ASPHALT  CONCRETE SURFACE COVERING TYPE: ASPHALT  CONCRETE SURFACE COVERING TYPE: ASPHALT  DESCRIPTION: CATCH BASIN  BENCHMARK ELEVATION:  DESCRIPTION:  TEST HOLE PLAN  Well location dug per measurements  Off as-built drawings.  Catch Basin  Water Valve	OBSERVED UTILITY COND	ITION:	Good Poor	OTHER			
PORTION OF UTILITY EXPOSED    OF	TEST HOLE MARKED BY:	F	PK NAIL HUB	✓ X MARK			<b>一</b>
2) UTILITY TOP ELEVATION 46.61' 3) UTILITY BOTTOM ELEVATION 4) WIDTH Type: Formed Rough Pour Racked 5) UTILITY TOP DEPTH FROM REFERENCE 8.90' 6) UTILITY BOTTOM DEPTH FROM REFERENCE SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: IN GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER BENCHMARK ELEVATION: 55.51' DESCRIPTION: DESCRIPTION: TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	PORTION OF UTILITY EXP	OSED	TOP 🗸 HALF	SIDE			5
3) UTILITY BOTTOM ELEVATION  4) WIDTH TYPE: FORMED ROUGH POUR RACKED  5) UTILITY TOP DEPTH FROM REFERENCE  5) UTILITY BOTTOM DEPTH FROM REFERENCE  SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: IN  GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER  BENCHMARK ELEVATION: DESCRIPTION: CATCH BASIN  BENCHMARK ELEVATION:	I) REFERENCE ELEVATION	N	55.5	['	2		
Well location dug per measurements  Of the data of the	2) UTILITY TOP ELEVATI	ON	46.6	0 '			6
5) UTILITY TOP DEPTH FROM REFERENCE 6) UTILITY BOTTOM DEPTH FROM REFERENCE 5. SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: IN  GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER  BENCHMARK ELEVATION: 55.5! DESCRIPTION: CATCH BASIN  DESCRIPTION:  TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve  TH 23  16.3'	3) UTILITY BOTTOM ELEV	VATION			3>	-	<u>\</u>
6) UTILITY BOTTOM DEPTH FROM REFERENCE  SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: IN  GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER  BENCHMARK ELEVATION: 55.51' DESCRIPTION: CATCH BASIN  BENCHMARK ELEVATION: TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	4) WIDTH T	YPE: FORME	Rough Pour	RACKED			
SURFACE COVERING TYPE: ASPHALT CONCRETE SOIL SURFACE COVERING DEPTH: IN  GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER  BENCHMARK ELEVATION: 55.5I' DESCRIPTION: CATCH BASIN  BENCHMARK ELEVATION: DESCRIPTION:  TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	5) UTILITY TOP DEPTH F	ROM REFERE	NCE 8.90'		<del>&lt;</del>	—-4- <del>&gt;</del>	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER  BENCHMARK ELEVATION: 55.51' DESCRIPTION: CATCH BASIN  BENCHMARK ELEVATION: DESCRIPTION:  TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	6) UTILITY BOTTOM DEP	TH FROM REF	FERENCE		l	I	
GENERALIZED SOIL PROFILE: SELECT FILL ROCK SAND CLAY OTHER  BENCHMARK ELEVATION: 55.51' DESCRIPTION: CATCH BASIN  BENCHMARK ELEVATION: DESCRIPTION:  TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	SURFACE COVERING TYPE	E: ASPHA	CONCRETE	SOIL V SURF	ACE COVERING DEPTH:	IN	
BENCHMARK ELEVATION:  DESCRIPTION:  TEST HOLE PLAN  Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	GENERALIZED SOIL PROF	ILE: SELEC					
Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	BENCHMARK ELEVATION:	55.51	l' DESCRIPTION:	CATCH BASIN			
Well location dug per measurements off as-built drawings.  Catch Basin  Water Valve	BENCHMARK ELEVATION:		DESCRIPTION:				
off as-built drawings.  Catch Basin  Water Valve  17.7'  TH 23  TH 23							
off as-built drawings.  Catch Basin  Water Valve  17.7'  TH 23  TH 23			THE RESERVE THE PERSON NAMED IN	PRODUCTION OF THE PERSON OF TH			A
off as-built drawings.  Catch Basin  Water Valve  17.7'  TH 23  TH 23	Well location dug	per meas	surements	E BUIL			Ni
TH 23  Water Valve							'/
TH 23 TH 16.3'		Manager 1			Catch Basin		- Deep
17.7' TH 23 16.3'					Catch Dasin		
TH 23 16.3'						Wa	ter Valve
TH 23 16.3'							
	THE RESERVE OF THE PERSON NAMED IN	THE RESERVE OF THE PARTY OF THE			17.7		
					TUO	16.3'	
Site Light Pole					IH 23		
Site Light Pole	-					1772	
Site Light Pole						AC.	- Solution
Site Light Pole	- The Valley of the Control of the C						
Site Light Pole						B0000 1000	
Site Light Pole						8888 FILE	10000
Site Light Pole	74					SSSSS (10)	
Site Light Pole	7					1000 H 1100	
	77		Site Light I	Pole		100 E	BOSE
						SSEE 100	
		1		7			1000
	The state of the s	-		7	and the same		
	30				The same		
							3













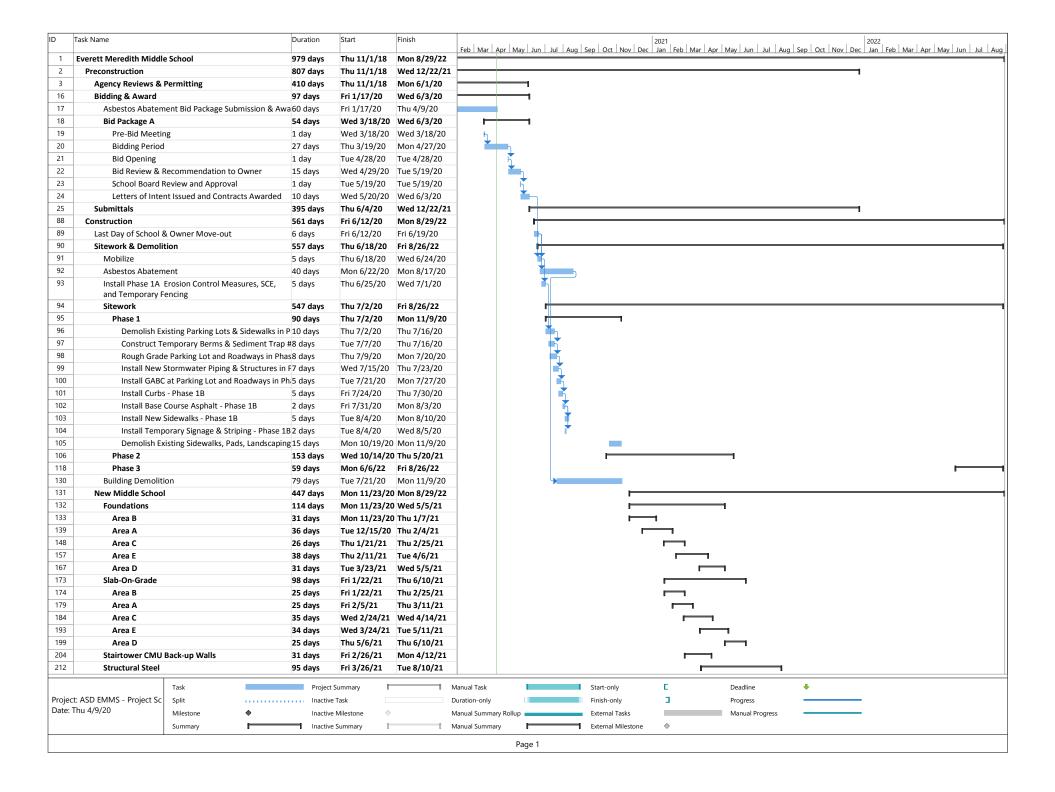


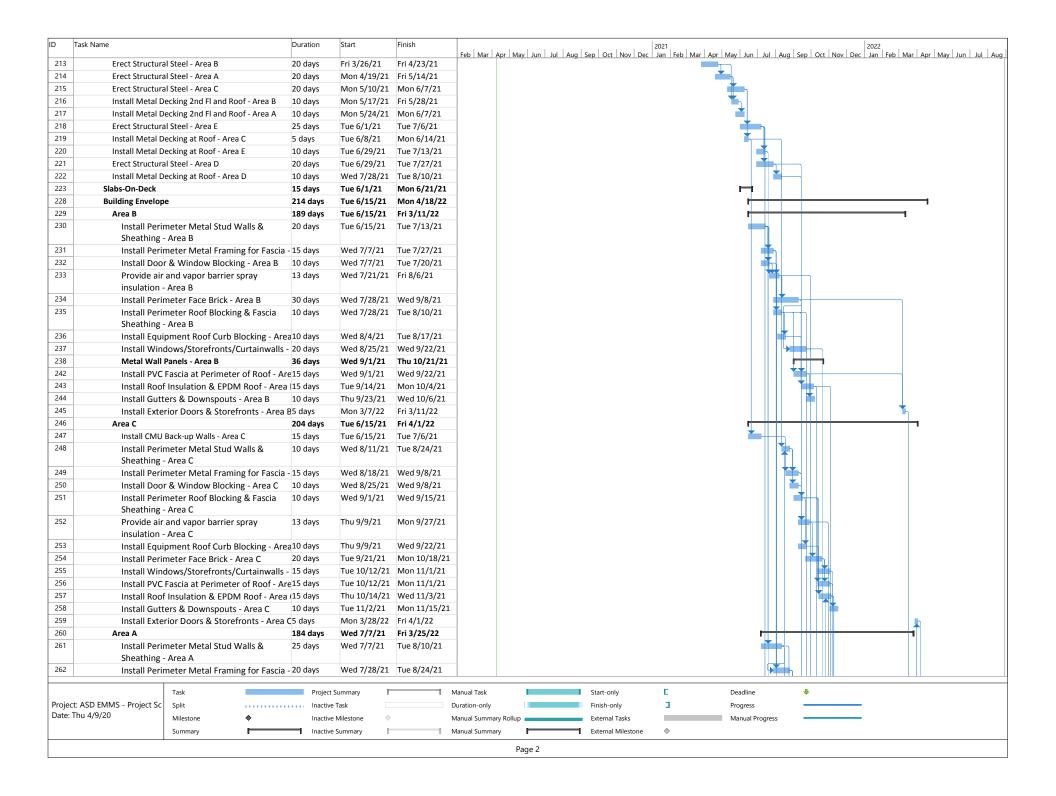


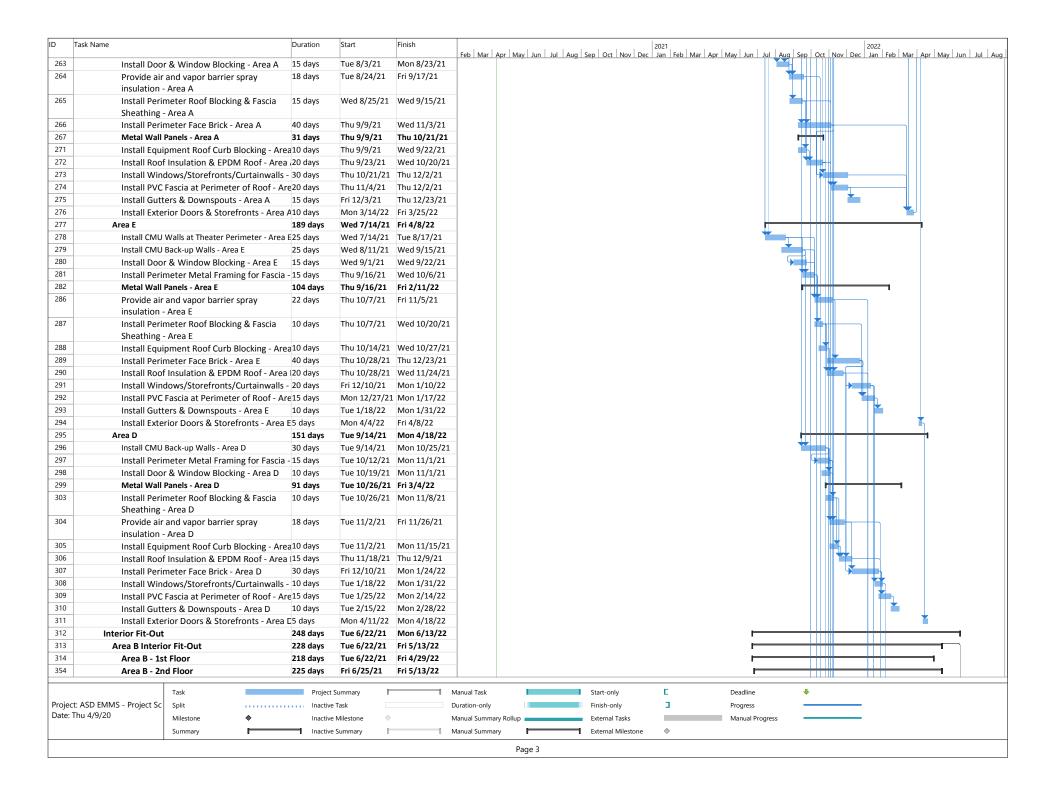




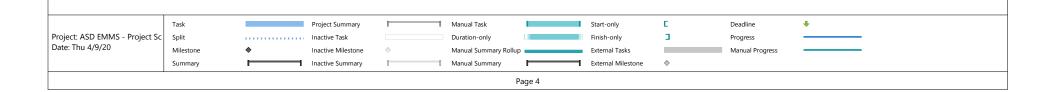








D	Task Name	Duration	Start	Finish	2021 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun May	lul   Auc
394	Area A Interior Fit-Out	242 days	Wed 6/30/21	Mon 6/13/22	mel Au may Juli Juli Aug Sep Ct. Nov Dec Jali Teu mel Au may Juli Juli Aug Sep Ct. Nov Dec Jali Teu mel Au may Juli Juli Aug Sep Ct. Nov Dec Jali Teu mel Au may Juli Juli Aug Sep Ct. Nov Dec Jali Teu mel Aug mel Mel Juli Aug Sep Ct. Nov Dec Jali Teu mel Aug mel Juli Aug Sep Ct. Nov Dec Jali Teu mel Aug mel Juli Aug Sep Ct. Nov Dec Jali Teu mel Aug mel Juli Aug Sep Ct. Nov Dec Jali Teu mel Aug mel Juli Aug Sep Ct. Nov Dec Jali Teu mel Aug mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli Aug Sep Ct. Nov Dec Jali Teu Mel Juli	Jui   Aug
395	Area A - 1st Floor	232 days	Wed 6/30/21	Fri 5/27/22		
437	Area A - 2nd Floor	239 days	Tue 7/6/21	Mon 6/13/22		
479	Area C Interior Fit-Out	228 days	Wed 7/7/21	Fri 5/27/22	F	
480	Area C - 1st Floor	228 days	Wed 7/7/21	Fri 5/27/22	I	
519	Area E Interior Fit-Out	230 days	Wed 7/14/21	Wed 6/8/22	F	
520	Area E - 1st Floor	230 days	Wed 7/14/21	Wed 6/8/22	1	
564	Area D Interior Fit-Out	152 days	Tue 10/26/21	Wed 6/1/22		
565	Area D - 1st Floor	152 days	Tue 10/26/21	Wed 6/1/22		
614	Building Watertight	82 days	Mon 10/4/21	Mon 1/31/22		
615	Area B Watertight	0 days	Mon 10/4/21	Mon 10/4/21	10/4	
616	Area A Watertight	0 days	Wed 10/20/21	Wed 10/20/21	10/20	
617	Area C Watertight	0 days	Wed 11/3/21	Wed 11/3/21	11/3	
618	Area E Watertight	0 days	Mon 1/10/22	Mon 1/10/22	1/10	
619	Area D Watertight	0 days	Mon 1/31/22	Mon 1/31/22	₹ 1/31	
620	Elevators	20 days	Thu 11/4/21	Thu 12/2/21	<b>├</b>	
621	Area A - Install Elevator	20 days	Thu 11/4/21	Thu 12/2/21	***	
622	Punchlists	14 days	Tue 6/14/22	Fri 7/1/22	The state of the s	
623	Owner Move-In and Set-up FF&E	30 days	Tue 7/5/22	Mon 8/15/22		
624	1st Day of School	0 days	Mon 8/29/22	Mon 8/29/22		*



# SECTION 088000 GLAZING

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Insulating glass units.
- B. Glazing units.
- C. Glazing compounds and accessories.

#### 1.02 RELATED REQUIREMENTS

- A. Section 081113 Hollow Metal Doors and Frames: Glazed lites in doors and borrowed lites.
- B. Section 081416 Flush Wood Doors: Glazed lites in doors.
- C. Section 081613 FRP Flush Doors: Glazed lites in doors.
- D. Section 084123 Fire Rated Aluminum-Framed Storefronts: Glazing in fire-rated windows.
- E. Section 084313 Aluminum-Framed Storefronts: Glazing furnished as part of storefront assembly.
- F. Section 088723 Safety and Security Films applied to glazing.

#### 1.03 REFERENCE STANDARDS

- A. 16 CFR 1201 Safety Standard for Architectural Glazing Materials; current edition.
- B. ANSI Z97.1 American National Standard for Safety Glazing Materials Used in Buildings, Safety Performance Specifications and Methods of Test; 2010.
- C. ASTM C864 Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers; 2005 (Reapproved 2015).
- D. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014a.
- E. ASTM C1036 Standard Specification for Flat Glass; 2011.
- F. ASTM C1048 Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2012.
- G. ASTM C1172 Standard Specification for Laminated Architectural Flat Glass; 2014.
- H. ASTM C1193 Standard Guide for Use of Joint Sealants; 2016.
- I. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials; 2016a.
- J. ASTM E1300 Standard Practice for Determining Load Resistance of Glass in Buildings; 2016.
- K. GANA (SM) GANA Sealant Manual; 2008.
- L. ICC (IBC) International Building Code; 2015.
- M. IGMA TM-3000 North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial & Residential Use; 1990 (2004).
- N. ITS (DIR) Directory of Listed Products; current edition.
- O. NFPA 252 Standard Methods of Fire Tests of Door Assemblies; 2012.
- P. NFPA 257 Standard on Fire Test for Window and Glass Block Assemblies; 2012.
- Q. NFRC 100 Procedure for Determining Fenestration Product U-factors; 2014.

GLAZING 088000 - 1

- R. NFRC 200 Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence: 2014.
- S. NFRC 300 Test Method for Determining the Solar Optical Properties of Glazing Materials and Systems; 2014.
- T. UL (DIR) Online Certifications Directory; current listings at database.ul.com.
- U. UL 9 Standard for Fire Tests of Window Assemblies; Current Edition, Including All Revisions.
- V. UL 10B Standard for Fire Tests of Door Assemblies; Current Edition, Including All Revisions.
- W. UL 10C Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.
- X. UL 263 Standard for Fire Tests of Building Construction and Materials; Current Edition, Including All Revisions.

#### 1.04 SUBMITTALS

- A. Product Data on Insulating Glass Unit and Glazing Unit Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.
- B. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available colors.
- C. Samples: Submit two samples 12 by 12 inch in size of glass units.
- D. Certificate: Certify that products of this section meet or exceed specified requirements.
- E. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

#### 1.05 QUALITY ASSURANCE

- A. Perform Work in accordance with IGMA TM-3000 for glazing installation methods. Maintain one copy on site.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.
- C. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years documented experience.

#### 1.06 FIELD CONDITIONS

- A. Do not install glazing when ambient temperature is less than 40 degrees F.
- B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

#### 1.07 WARRANTY

- A. See Section 017800 Closeout Submittals, for additional warranty requirements.
- B. Insulating Glass Units: Provide a ten (10) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including replacement of failed units.
- C. Laminated Glass: Provide a ten (10) year manufacturer warranty to include coverage for delamination, including replacement of failed units.

088000 - 2 GLAZING

#### **PART 2 PRODUCTS**

#### 2.01 MANUFACTURERS

- A. Float Glass Manufacturers:
  - 1. Guardian Industries Corp: www.sunguardglass.com.
  - 2. Pilkington North America Inc: www.pilkington.com/na.
  - 3. PPG Industries, Inc: www.ppgideascapes.com.
  - 4. Substitutions: Refer to Section 016000 Product Requirements.
- B. Fire-Resistance-Rated Glass: Provide products as required to achieve indicated fire-rating period.
  - 1. Manufacturers:
    - a. SAFTIFIRST, a division of O'Keeffe's Inc: www.safti.com/#sle.
    - b. Technical Glass Products: www.fireglass.com/#sle.
    - c. Substitutions: Refer to Section 016000 Product Requirements.
- C. Fire-Protection-Rated Glass: Provide products as required to achieve indicated fire-rating period.
  - 1. Manufacturers:
    - a. SAFTIFIRST, a division of O'Keeffe's Inc: www.safti.com/#sle.
    - b. Technical Glass Products: www.fireglass.com/#sle.
    - c. Substitutions: Refer to Section 016000 Product Requirements.

#### 2.02 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES

- A. Provide type and thickness of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of glass.
  - 1. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.
  - 2. Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
  - 3. Glass thicknesses listed are minimum.
- B. Vapor Retarder and Air Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure vapor retarder and air barrier.
  - 1. In conjunction with vapor retarder and joint sealer materials described in other sections.
- C. Thermal and Optical Performance: Provide exterior glazing products with performance properties as indicated. Performance properties are in accordance with manufacturer's published data as determined with the following procedures and/or test methods:
  - 1. Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
  - 2. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
  - 3. Solar Optical Properties: Comply with NFRC 300 test method.

#### 2.03 GLASS MATERIALS

- A. Float Glass: Provide float glass based glazing unless noted otherwise.
  - 1. Annealed Type: ASTM C1036, Type I Transparent Flat, Class 1 Clear, Quality-Q3.
  - 2. Heat-Strengthened and Fully Tempered Types: ASTM C1048, Kind HS and FT.
  - 3. Fully Tempered Safety Glass: Complies with ANSI Z97.1 and 16 CFR 1201 criteria.

GLAZING 088000 - 3

- 4. Impact Resistant Safety Glass: Complies with ANSI Z97.1 and 16 CFR 1201 criteria; Class A/Category II.
- B. Laminated Glass: Float glass laminated in accordance with ASTM C1172.
  - 1. Laminated Safety Glass: Complies with ANSI Z97.1 Class A or 16 CFR 1201 Category II impact test requirements.
  - 2. Polyvinyl Butyral (PVB) Interlayer: 0.030 inch thick, minimum.

#### 2.04 BASIS OF DESIGN - INSULATING GLASS UNITS

- A. Type 1 Vision glazing, with Low-E coating.
  - 1. Applications: Exterior insulating glass glazing unless otherwise indicated.
  - 2. Space between lites filled with argon.
  - 3. Total Thickness: 1 inch.
  - 4. Thermal Transmittance (U-Value): 0.24, nominal.
  - 5. Visible Light Transmittance (VLT): 62 percent, nominal.
  - 6. Solar Heat Gain Coefficient (SHGC): 0.27, nominal.
  - 7. Metal Edge Spacers: Stainless steel, bent and soldered corners.
  - 8. Edge Seal:
    - a. Dual-Sealed System: Provide polyisobutylene sealant as primary seal applied between spacer and glass panes, and silicone, polysulfide, or polyurethane sealant as secondary seal applied around perimeter.
  - 9. Color: Black.
  - 10. Basis of Design Guardian Glass, LLC: www.guardianglass.com.
  - 11. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
    - a. Low-E Coating: SunGuard SNX 62/27 on #2 surface.
  - 12. Inboard Lite: Annealed float glass, 1/4 inch thick.
    - a. Coating: No coating on inboard lite.
    - b. Glass: Clear.
- B. Type 1A -Sealed Insulating Glass Units: Safety glazing:
  - 1. Applications: Provide this type of glazing in the following locations:
    - a. Glazed lites in exterior doors.
    - b. Glazed sidelights and panels next to doors.
    - c. Other locations required by applicable federal, state, and local codes and regulations.
    - d. Other locations indicated on the drawings.
  - 2. Type: Same as Type 1 except use fully tempered float glass for both outboard and inboard lites.
- C. Type 1B -Sealed Insulating Glass Units: Obscure glazing:
  - 1. Applications: Provide this type of glazing in the following locations:
    - a. Exterior windows in gymnasium.
    - b. Other locations indicated on the drawings.
  - 2. Type: Same as Type 1 except use patterned obscure glass for inboard lite. Both inboard and outboard lites shall be laminated glass.
    - a. Pattern: No. 62
- D. Type 2 Spandrel glazing.
  - 1. Applications: Exterior spandrel glazing unless otherwise indicated.
  - 2. Space between lites filled with argon.
  - 3. Basis of Design Guardian Glass, LLC: www.guardianglass.com.
  - 4. Outboard Lite: Heat-strengthened float glass, 1/4 inch thick, minimum.

088000 - 4 GLAZING

- a. Tint: Clear.
- b. Coating: Same as on vision units, on #2 surface.
- 5. Inboard Lite: Fully tempered float glass, 1/4 inch thick.
  - a. Tint: Clear.
  - b. Opacifier: Ceramic frit, on #3 surface.
  - c. Opacifier Color: as selected by Architect from manufacturer's full range.
  - d. Coating: OpaciCoat 300.
- 6. Total Thickness: 1 inch.
- E. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of another acceptable manufacturer.
- F. Substitution Procedures: See Section 016000 Product Requirements.
  - 1. For any product not identified as "Basis of Design", submit information as specified for substitutions.

#### 2.05 GLAZING UNITS

- A. Type 3 Monolithic Interior Vision Glazing:
  - 1. Applications: Interior glazing unless otherwise indicated.
  - 2. Glass Type: Fully tempered float glass.
  - 3. Tint: Clear.
  - 4. Thickness: 1/4 inch, nominal.
  - 5. Locations: Interior vision panels, doors and sidelites.
  - 6. Type 3A: Same as Type 3 except use patterned obscure glass.
    - a. Pattern: No. 62
- B. Type 4 Fire-Resistance-Rated Glazing: Type, thickness, and configuration of glazing that contains flame, smoke, and blocks radiant heat, as required to achieve indicated fire-rating period of 60 minutes.
  - 1. Applications:
    - a. Glazing in fire-rated window assembly.
    - b. Other locations as indicated on drawings.
  - 2. Provide products listed by ITS (DIR) or UL (DIR) and approved by authorities having jurisdiction.
  - 3. Safety Glazing Certification: 16 CFR 1201 Category II.
  - 4. Glazing Method: As required for fire rating.
  - 5. Fire-Rating Period: 60 minutes.
  - 6. Nominal Thickness: 1-1/8 inch.
  - 7. Markings for Fire-Resistance-Rated Glazing Assemblies: Provide permanent markings on fire-resistance-rated glazing in compliance with ICC (IBC), local building code, and authorities having jurisdiction.
    - a. "W" meets wall assembly criteria of ASTM E119 or UL 263 fire test standards.
    - b. "D" meets fire door assembly criteria of NFPA 252, UL 10B, or UL 10C fire test standards.
    - c. "H" meets fire door assembly hose stream test of NFPA 252, UL 10B, or UL 10C fire test standards.
    - d. "T" meets temperature rise of not more than 450 degrees F above ambient at end of 30 minutes fire exposure in accordance with NFPA 252, UL 10B, or UL 10C fire test standards.
    - e. "XXX" placeholder that represents fire-rating period, in minutes.
  - 8. Manufacturers:

GLAZING 088000 - 5

- a. SAFTIFIRST, a division of O'Keeffe's Inc; SuperLite II-XL 60: www.safti.com/#sle.
- b. Technical Glass Products; Pilkington Pyrostop 60: www.fireglass.com/#sle.
- c. Substitutions: Refer to Section 016000 Product Requirements.
- C. Type 5 Fire-Protection-Rated Glazing: Type, thickness, and configuration of glazing that contains flame, smoke, and does not block radiant heat, as required to achieve indicated fire-rating period of 45 minutes.
  - 1. Applications:
    - a. Glazing in fire-rated door assembly.
    - b. Glazing in fire-rated window assembly.
    - c. Other locations as indicated on drawings.
  - 2. Provide products listed by ITS (DIR) or UL (DIR) and approved by authorities having jurisdiction.
  - 3. Safety Glazing Certification: 16 CFR 1201 Category II.
  - 4. Glazing Method: As required for fire rating.
  - 5. Fire-Rating Period: 45 minutes.
  - 6. Markings for Fire-Protection-Rated Glazing Assemblies: Provide permanent markings on fire-protection-rated glazing in compliance with ICC (IBC), local building code, and authorities having jurisdiction
    - a. "D" meets fire door assembly criteria of NFPA 252, UL 10B, or UL 10C fire test standards.
    - b. "OH" meets fire window assembly criteria including hose stream test of NFPA 257, or UL 9 fire test standards.
    - c. "H" meets fire door assembly hose stream test of NFPA 252, UL 10B, or UL 10C fire tests standards.
    - d. "XXX" placeholder that represents fire-rating period, in minutes.
  - 7. Products:
    - a. Technical Glass Products; Pilkington Pyrostop 45: www.fireglass.com
    - b. Safti-First SuperLite II-XL 45: safti.com
    - c. Substitutions: See Section 016000.
- D. Type 6 Fire-Rated Safety Glazing 20 minute:
  - 1. Applications: Provide this type of glazing in the following locations:
    - a. Glazed lites in doors having a 20 minute fire rating.
    - b. Other locations indicated on the drawings.
  - 2. Manufacturer and Product:
    - a. Technical Glass Products Fireglass20: www.fireglass.com
    - b. Safti-First SuperLite I-W: safti.com: safti.com
    - c. Substitutions: See Section 016000.
  - 3. Fire Rating: 20 minutes, without hose stream test.
  - 4. Type: fire-rated and impact safety-rated glazing material.
  - 5. Thickness: 1/4 inch (6 mm).
  - 6. Impact safety rating: ANSI Z97.1 and CPSC 16CFR1201 (Cat I and II)
  - 7. Glazing Method: As required for fire rating.

#### 2.06 GLAZING COMPOUNDS

A. Butyl Sealant: Single component; ASTM C920, Grade NS, Class 12-1/2, Uses M and A, Shore A hardness of 10 to 20; black color.

088000 - 6 GLAZING

- B. Polysulfide Sealant: Two component; chemical curing, non-sagging type; ASTM C920, Type M, Grade NS, Class 25, Uses M, A, and G; with cured Shore A hardness range of 15 to 25; color as selected.
- C. Silicone Sealant: Single component; neutral curing; capable of water immersion without loss of properties; non-bleeding, non-staining; ASTM C920, Type S, Grade NS, Class 25, Uses M, A, and G; with cured Shore A hardness range of 15 to 25; clear color.

#### 2.07 ACCESSORIES

- A. Setting Blocks: Silicone, with 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot of glazing or minimum 4 inch by width of glazing rabbet space minus 1/16 inch by height to suit glazing method and pane weight and area.
- B. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness; ASTM C864 Option II. Minimum 3 inch long by one half the height of the glazing stop by thickness to suit application, self adhesive on one face.
- C. Glazing Tape, Back Bedding Mastic Type: Preformed, butyl-based, 100 percent solids compound with integral resilient spacer rod applicable to application indicated; 5 to 30 cured Shore A durometer hardness; coiled on release paper; black color.
  - 1. Width: As required for application.
  - 2. Thickness: As required for application.
- D. Glazing Gaskets: Resilient silicone extruded shape to suit glazing channel retaining slot; color black.

#### PART 3 EXECUTION

#### 3.01 VERIFICATION OF CONDITIONS

- A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.
- B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.
- C. Verify that sealing between joints of glass framing members has been completed effectively.
- D. Proceed with glazing system installation only after unsatisfactory conditions have been corrected.

#### 3.02 PREPARATION

- A. Clean contact surfaces with appropriate solvent and wipe dry immediately before glazing. Remove coatings that are not tightly bonded to substrates.
- B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
- C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

#### 3.03 INSTALLATION, GENERAL

- A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.
- B. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.
- C. Do not exceed edge pressures around perimeter of glass lites as stipulated by glass manufacturer.

GLAZING 088000 - 7

- D. Set glass lites of system with uniform pattern, draw, bow, and similar characteristics.
- Set glass lites in proper orientation so that coatings face exterior or interior as indicated.
- F. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, etc.

#### 3.04 INSTALLATION - DRY GLAZING METHOD (GASKET GLAZING)

- A. Application Exterior and/or Interior Glazed: Set glazing infills from either the exterior or the interior of the building.
- B. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.
- C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.
- D. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

#### 3.05 INSTALLATION - PRESSURE GLAZED SYSTEMS

- A. Application Exterior Glazed: Set glazing infills from exterior side of building.
- B. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.
- C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.
- D. Install pressure plates without displacing glazing gasket; exert pressure for full continuous contact.
- E. Install cover plate.

### 3.06 FIELD QUALITY CONTROL

- A. Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.
- B. Monitor and report installation procedures and unacceptable conditions.

#### 3.07 CLEANING

- A. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.
- B. Remove non-permanent labels immediately after glazing installation is complete.
- C. Clean glass and adjacent surfaces after sealants are fully cured.
- D. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.

#### 3.08 PROTECTION

A. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

#### END OF SECTION

088000 - 8 GLAZING